2015 OWNER'S MANUAL

DEP
DEALER E-PROCESS

KIA
The Power to Surprise

Kia, THE COMPANY

Thank you for becoming the owner of a new Kia vehicle.

As a global car manufacturer focused on building high-quality vehicles with exceptional value, Kia Motors is dedicated to providing you with a customer service experience that exceeds your expectations.

All information contained in this Owner's Manual is accurate at the time of publication. However, Kia reserves the right to make changes at any time so that our policy of continual product improvement can be carried out.

This manual applies to all models of this vehicle and includes descriptions and explanations of optional as well as standard equipment. As a result, you may encounter material in this manual that is not applicable to your specific Kia vehicle.

Drive safely and enjoy your Kia!

Thank you for choosing a Kia vehicle.

When you require service, remember that your Kia dealer knows your vehicle best. Your dealer has factory-trained technicians, recommended special tools and genuine Kia replacement parts. It is dedicated to your complete customer satisfaction.

Because subsequent owners require this important information as well, this publication should remain with the vehicle if it is sold.

This manual will familiarize you with operational, maintenance and safety information about your new vehicle. It is supplemented by a Warranty and Consumer Information manual that provides important information on all warranties regarding your vehicle.

We urge you to read these publications carefully and follow the recommendations to help assure enjoyable and safe operation of your new vehicle.

Kia offers a great variety of options, components and features for its various models. Therefore, some of the equipment described in this manual, along with the various illustrations, may not be applicable to your particular vehicle.

The information and specifications provided in this manual were accurate at the time of printing. Kia reserves the right to discontinue or change specifications or design at any time without notice and without incurring any obligation. If you have questions, always check with your Kia dealer.

We assure you of our continuing interest in your motoring pleasure and satisfaction in your Kia vehicle.

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Table of contents

Introduction 1
How to use this manual / Fuel requirements / Vehicle break-in process / Vehicle data collection and event data recorders

Your vehicle at a glance 2
Exterior overview / Interior overview / Instrument panel overview / Engine compartment

Seat and safety features of your vehicle 3
Seats / Seat belts / Child restraint system / Air bag

Features of your vehicle 4
Smart key / Door locks / Trunk / Windows / Hood / Fuel filler lid / Panoramic sunroof / Steering wheel / Mirrors / Instrument cluster / Lighting / Wipers & Washers / Climate control system / Audio system / Etc.

Driving your vehicle 5
Before driving / Engine start/stop button / Transmission / Brake system / Cruise control system / Advanced Smart Cruise Control system / Winter driving / Vehicle load limit / Etc.

What to do in an emergency 6
Road warning / Emergency while driving / Emergency starting / Engine overheat / TPMS / Flat tire / Towing / Etc.

Maintenance 7
Engine compartment / Maintenance service / Engine oil / Engine coolant / Brake fluid / Washer fluid / Parking brake / Air cleaner / Wiper blades / Battery / Tire and wheels / Fuses / Light bulbs / Etc.

Specifications, Consumer information and Reporting safety defects 8

Index I

Introduction

How to use this manual 1-2
Fuel requirements.....1-3
- Gasoline containing alcohol and methanol 1-3
- Do not use methanol.....1-4
- Fuel Additives.....1-4

Vehicle data collection and event data recorders ..1-6

HOW TO USE THIS MANUAL

We want to help you get the greatest possible driving pleasure from your vehicle. Your Owner's Manual can assist you in many ways. We strongly recommend that you read the entire manual. To help minimize the chance of death or injury, you must read the WARNING and CAUTION sections in the manual.

Illustrations complement the words in this manual to best explain how to enjoy your vehicle. By reading your manual, you will learn about features, important safety information, conditions.

The general layout of the manual is provided in the Table of Contents. Use the index when looking for a specific area or subject; it has an alphabetical listing of all located in the back of this manual.

Sections: This manual has eight sections plus an index. Each section begins with a brief list of contents so you can tell at a glance if that section has the information you want.

You will find various types of safety instructions in this manual. These instructions were prepared to help enhance your personal safety.

Carefully read and follow ALL procedures and recommendations provided in these instructions.

⚠ WARNING

A WARNING indicates a situation in which harm, serious bodily injury or death could result if the warning is ignored.

⚠ CAUTION

A CAUTION indicates a situation in which damage to your vehicle could result if the caution is ignored.

✻ NOTICE

A NOTICE indicates interesting or helpful information is being provided.

FUEL REQUIREMENTS

Your new vehicle is designed to obtain maximum performance with UNLEADED FUEL, as well as minimize exhaust emissions and spark plug fouling.

3.8 engine

Your new vehicle is designed to use only unleaded fuel having an octane number (R+M)/2) of 87 (Research Octane Number 91) or higher.

5.0 engine

Your new vehicle is designed to use only unleaded fuel having an octane number ((R+M)/2) of 87 (Research Octane Number 91) or higher.

For improved vehicle performance, premium unleaded fuel with an octane number ((R+M)/2) of 91 (Research Octane Number 96) or higher is recommended.

Never add any fuel system cleaning agents to the fuel tank other than what has been specified. (Consult an authorized Kia dealer for details.)

⚠ WARNING

■ Refueling

- **Do not "top off" after the nozzle automatically shuts off. Attempts to force more fuel into the tank can cause fuel overflow onto you and the ground causing a risk of fire.**
- **Always check that the fuel cap is installed securely to prevent fuel spillage, especially in the event of an accident.**

✻ NOTICE

Tighten the cap until it clicks once. otherwise the Check Engine light will illuminate.

Gasoline containing alcohol and methanol

Gasohol, a mixture of gasoline and ethanol (also known as grain alcohol), and gasoline or gasohol containing methanol (also known as wood alcohol) are being marketed along with or instead of leaded or unleaded gasoline.

Pursuant to EPA regulations, ethanol may be used in your vehicle. Do not use gasohol containing more than 10% ethanol, and do not use gasoline or gasohol containing any methanol. Ethanol provides less energy than gasoline and it attracts water, and it is thus likely to reduce your fuel efficiency and could lower your MPG results. Methanol may cause drivability problems and damage to the fuel system. Discontinue using gasohol of anykind if drivability problems occur. Vehicle damage or drivability problems may not be covered by the manufacturer's warranty if they result from the use of:

1. Gasoline or gasohol containing methanol.
2. Leaded fuel or leaded gasohol.

"E85" fuel is an alternative fuel comprised of 85 percent ethanol and 15 percent gasoline, and is manufactured exclusively for use in Flexible Fuel Vehicles. **"E85" is not compatible with your vehicle.** Use of "E85" may result in poor engine performance and damage to your vehicle's engine and fuel system. Kia recommends that customers do not use fuel with an ethanol content exceeding 10 percent.

✻ NOTICE

Your New Vehicle Limited Warranty does not cover damage to the fuel system or any performance problems caused by the use of "E85" fuel.

Gasoline containing MMT

Some gasoline contains harmful manganese-based fuel additives such as MMT (Methylcyclopentadienyl Manganese Tricarbonyl).

Kia does not recommend the use of gasoline containing MMT.

This type of fuel can reduce vehicle performance and affect your emission control system.

The malfunction indicator lamp on the cluster may come on.

Do not use methanol

Fuels containing methanol (wood alcohol) should not be used in your vehicle. This type of fuel can reduce vehicle performance and damage components of the fuel system.

✻ NOTICE

Your New Vehicle Limited Warranty may not cover damage to the fuel system and any performance problems that are caused by the use of fuels containing methanol.

Fuel Additives

Kia recommends that you use good quality gasolines treated with detergent additives such as TOP TIER Detergent Gasoline, which helps prevent deposit formation in the engine. These gasolines will help the engine run cleaner and enhance performance of the Emission Control System. For more information on TOP TIER Detergent Gasoline, please go to the website (www.toptiergas.com).

For Customers who do not use TOP TIER Detergent Gasoline regularly, and have problems starting or the engine does not run smoothly, additives that you can buy separately may be added to the gasoline. If TOP TIER Detergent Gasoline is not available, one bottle of additive added to the fuel tank at 7,500 miles or every engine oil change is recommended. Additives are available from your authorized Kia dealer along with information on how to use them. Do not mix other additives.

Operation in foreign countries

If you are going to drive your vehicle in another country, be sure to:

- Observe all regulations regarding registration and insurance.
- Determine that acceptable fuel is available.

VEHICLE BREAK-IN PROCESS

No special break-in period is needed. By following a few simple precautions for the first 600 miles (1,000 km) you may add to the performance, economy and life of your vehicle.

- Do not race the engine.
- While driving, keep your engine speed (rpm, or revolutions per minute) between 2,000 rpm and 4,000 rpm.
- Do not maintain a single speed for long periods of time, either fast or slow. Varying engine speed is needed to properly break-in the engine.
- Avoid hard stops, except in emergencies, to allow the brakes to seat properly.

VEHICLE DATA COLLECTION AND EVENT DATA RECORDERS

This vehicle is equipped with an event data recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, such as an air bag deployment or hitting a road obstacle, data that will assist in understanding how a vehicle's systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less. The EDR in this vehicle is designed to record such data as:

- **How various systems in your vehicle were operating;**
- **Whether or not the driver and passenger safety belts were buckled/ fastened;**
- **How far (if at all) the driver was depressing the accelerator and/or brake pedal; and,**
- **How fast the vehicle was traveling.**

These data can help provide a better understanding of the circumstances in which crashes and injuries occur. NOTE: EDR data are recorded by your vehicle only if a non-trivial crash situation occurs; no data are recorded by the EDR under normal driving conditions and no personal data (e.g., name, gender, age, and crash location) are recorded. However, other parties, such as law enforcement, could combine the EDR data with the type of personally identifying data routinely acquired during a crash investigation.

To read data recorded by an EDR, special equipment is required, and access to the vehicle or the EDR is needed. In addition to the vehicle manufacturer, other parties, such as law enforcement, that have the special equipment, can read the information if they have access to the vehicle or the EDR.

Your vehicle at a glance

Exterior overview 2-2
Interior overview 2-4
Instrument panel overview.....2-5
Engine compartment 2-7

EXTERIOR OVERVIEW

■ Front view

1. Hood.....4-32
2. Head lamp.....4-115
3. Fog lamp 4-119
4. Tire and wheel 7-53, 8-5
5. Outside rearview mirror.....4-53
6. Panoramic Sunroof.....4-36
7. Front windshield wiper blades....4-120, 7-45
8. Windows.....4-28

❈ The actual shape may differ from the illustration.

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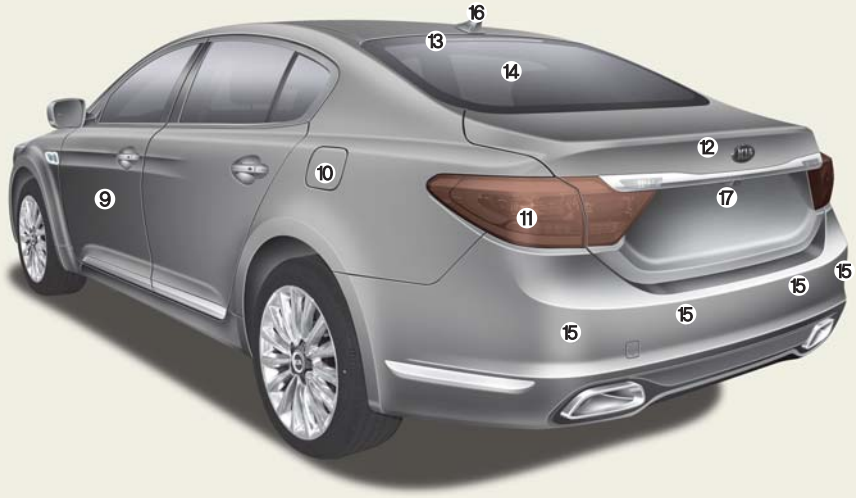
■ **Rear view**



9. Door.....4-17
10. Fuel filler lid.....4-34
11. Rear combination lamp.....7-90
12. Trunk lid.....4-21
13. High mounted stop lamp.....7-91
14. Rear window defroster.....4-127
15. Parking assist system.....4-102
16. Antenna.....4-163
17. Rearview camera.....4-107

❈ The actual shape may differ from the illustration.

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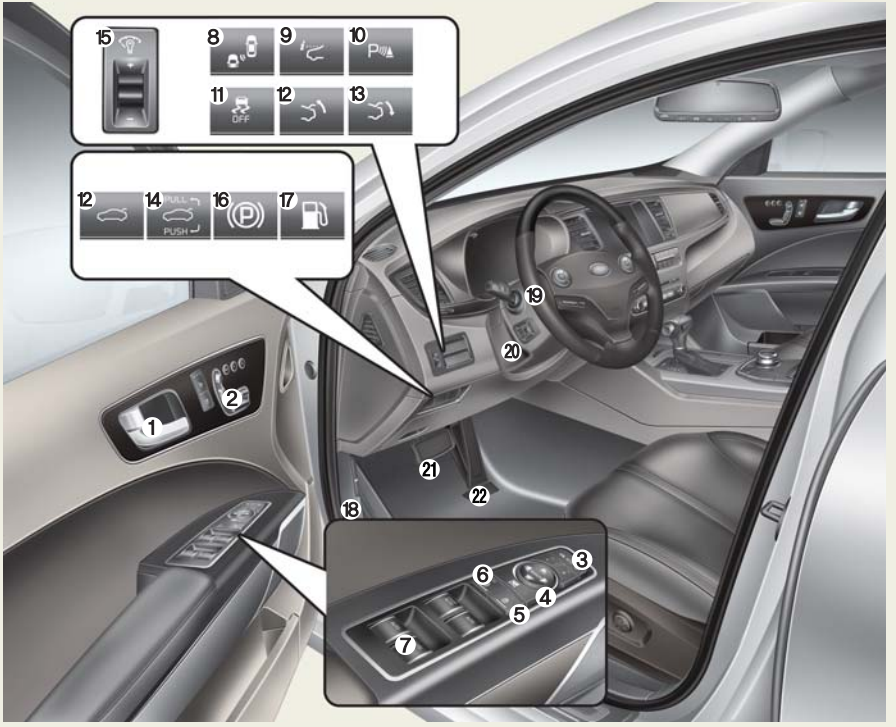
INTERIOR OVERVIEW



1. Inside door handle 4-18
2. Front power seat adjust switch 3-5
3. Outside rearview mirror folding 4-55
4. Outside rearview mirror control 4-54
5. Power window lock switch 4-31
6. Central door lock switch 4-19
7. Power window switch 4-29
8. BSD On/OFF button 5-79
9. HUD On/OFF button 4-100
10. Parking Assist button 4-102
11. ESC Off button 5-42
12. Trunk lid open button 4-21, 22
13. Trunk lid close button 4-21, 22
14. Trunk lid open / close button 4-22
15. Instrument panel illumination control lever 4-58
16. Electric parking brake switch 5-30
17. Fuel filler lid open switch 4-34
18. Hood release lever 4-32
19. Steering wheel 4-42
20. Tilt and telescopic steering control lever ... 4-42
21. Brake pedal 5-27
22. Accelerator pedal 5-9

❉ The actual shape may differ from the illustration.

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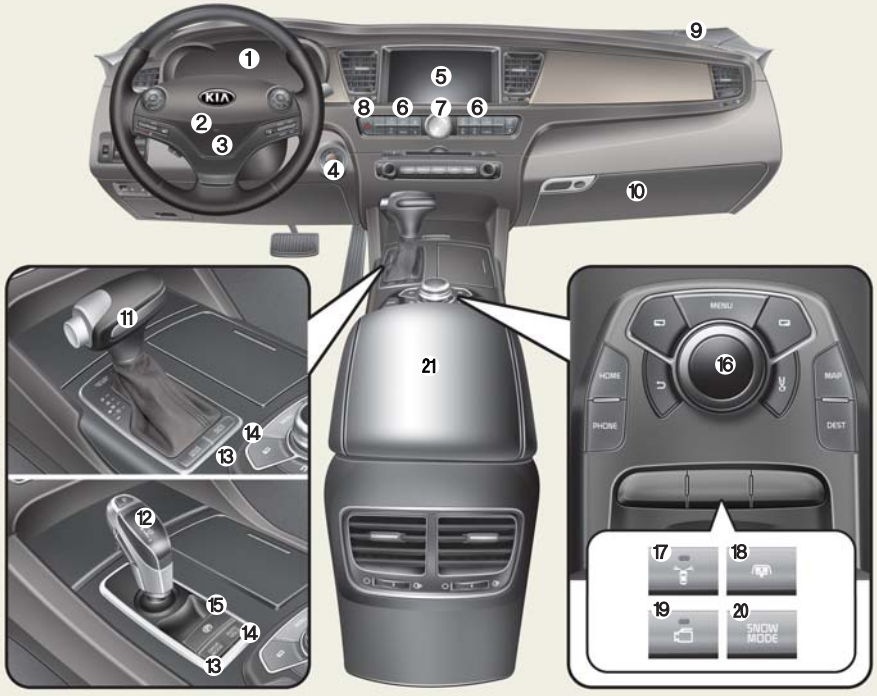
INSTRUMENT PANEL OVERVIEW



❉ The actual shape may differ from the illustration.

1. Instrument cluster 4-57
2. Horn 4-44
3. Driver's front air bag 3-51
4. Engine start/stop button 5-6
5. Audio / Video / Navigation 4-162
6. Climate control system 4-128
7. Clock 4-156
8. Hazard warning flasher 6-2
9. Passenger's front air bag 3-51
10. Glove box 4-147
11. SBC(Shift by cable) control lever 5-11
12. SBW(Shift by wire) control lever 5-16
13. Drive mode button 5-52
14. Auto hold button 5-36
15. Electric parking brake switch 5-30
16. DIS central key 4-162
17. Front blind spot monitoring system On/Off button 4-110
18. Rear curtain folding button 4-159
19. Surround View Monitoring System On/Off button 4-111
20. Snow mode button 5-52
21. Center console storage box 4-146

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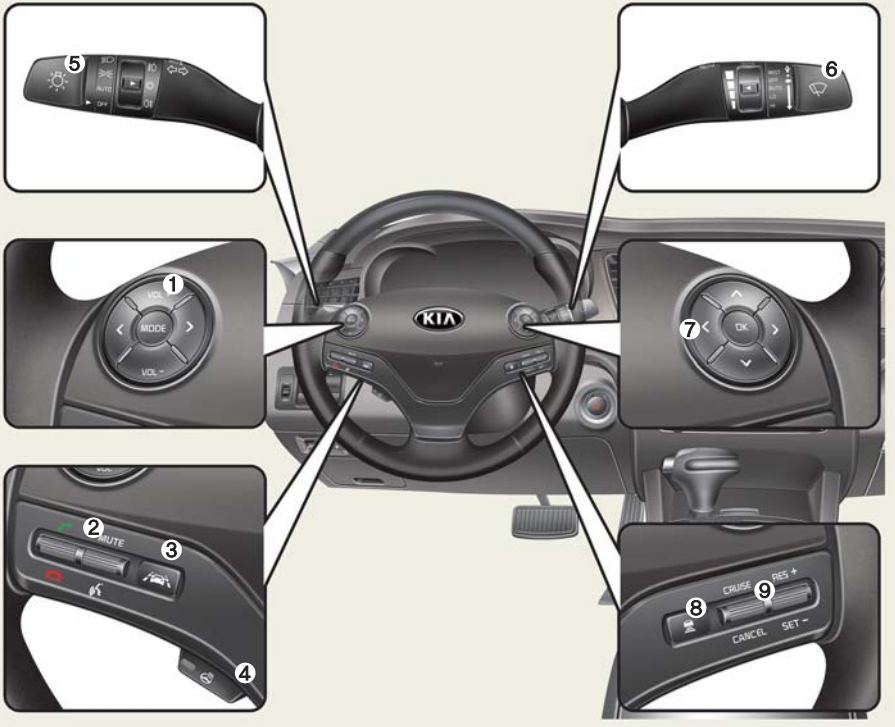


1. Audio remote control buttons 4-164
2. Bluetooth hands free buttons 4-163
3. LDWS On/Off button 5-75
4. Heated steering wheel On/Off button....4-43
5. Light control / Turn signals lever.....4-114
6. Wiper and washer control lever.....4-120
7. LCD display control 4-58
8. Advanced Smart Cruise Control switch (vehicle to vehicle distance setting) 5-65
9. Cruise control switch / Advanced Smart Cruise Control Switch 5-56/5-61

❈ The actual shape may differ from the illustration.

OKH013005N

ENGINE COMPARTMENT

■ 3.8L Engine

1. Engine oil dipstick.....7-32
2. Engine oil filler cap 7-32
3. Engine coolant reservoir.....7-34
4. Radiator cap 7-36
5. Brake fluid reservoir.....7-37
6. Power steering fluid reservoir 7-38
7. Windshield washer fluid reservoir.....7-39
8. Air cleaner.....7-40
9. Fuse box 7-68
10. Jumper terminal 6-5

❉ The actual engine compartment in the vehicle may differ from the illustration.
❉ The battery is in the trunk.

OKH013007N

■ 5.0L Engine

1. Engine coolant reservoir.....7-34
2. Radiator cap 7-36
3. Brake fluid reservoir.....7-37
4. Air cleaner.....7-40
5. Engine oil dipstick.....7-32
6. Engine oil filler cap 7-32
7. Windshield washer fluid reservoir.....7-39
8. Fuse box.....7-68
9. Power steering fluid reservoir 7-38
10. Jumper terminal.....6-5

❈ The actual engine compartment in the vehicle may differ from the illustration.
❈ The battery is in the trunk.

OKH013006N

Seat and safety features of your vehicle

Seat 3-2
- Front seat adjustment.....3-4
- Driver position memory system.....3-7
- Headrest (for front seat).....3-8
- Rear seat adjustment.....3-13
- Headrest (for rear seat).....3-16

Seat belts.....3-20
- Seat belt restraint system.....3-20
- Pre-tensioner seat belt 3-25
- Pre-Safe Seat belt (PSB) 3-28
- Seat belt precautions 3-29
- Care of seat belts.....3-31

Child restraint system 3-32
- Using a child restraint system 3-33
- Tether anchor system 3-36
- Lower anchor system 3-37

Air bag - advanced supplemental restraint system 3-39
- Air bag system operation 3-40
- Do not install a child restraint on the front passenger's seat 3-41
- Air bag warning light 3-42
- SRS components and functions.....3-43
- Occupant Detection System (ODS) 3-45
- Driver's and passenger's front air bag 3-51
- Side air bag.....3-53
- Curtain air bag 3-55
- Inflation and non-inflation conditions of the air bag.3-56
- SRS Care 3-61
- Air bag warning label 3-62

SEAT

OKH033001N

Driver's seat

(1) Seat sliding forward or backward**/ Seat height and cushion tilting adjustment
(2) Seat cushion length adjustment
(3) Seatback angle adjustment
(4) Headrest height adjustment
(5) Driver position memory system
(6) Lumbar support adjustment

Front passenger's seat

(7) Seat sliding forward or backward/ Seat height and cushion tilting adjustment*
(8) Seatback angle adjustment
(9) Headrest height adjustment

Rear seat

(10) Seat sliding forward or backward adjustment with seatback angle adjustment

(11) Easy access button

(12) Front passenger's seat forward and rearward*

(13) Front passenger's seat back angle*

(14) Lumber support adjustment

(15) Rear lock button

(16) Headrest

(17) Armrest

(18) Ski through*

*: if equipped

**: The height of the driver's headrest is automatically adjusted simultaneously with the driver's seat sliding adjustment operation.

⚠ WARNING

■ Loose objects

Do not place anything in the driver's foot well or under the front seats. Loose objects in the driver's foot area could interfere with the operation of the foot pedals.

⚠ WARNING

■ Driver responsibility for passengers

The driver must advise the passenger to keep the seatback in an upright position whenever the vehicle is in motion. If a seat is reclined during an accident, the restraint system's ability to restrain will be greatly reduced.

⚠ WARNING

■ Seat cushion

Occupants should never sit on seat cushions. The passenger's hips may slide under the lap portion of the seat belt during an accident or a sudden stop.

⚠ WARNING

■ Driver's seat

- **Never attempt to adjust the seat while the vehicle is moving. This could result in loss of control of your vehicle.**
- **Do not allow anything to interfere with the normal position of the seatback. Storing items against a seatback or in any other way interfering with proper locking of a seatback could result in a serious or fatal injury in a sudden stop or collision.**

(Continued)

(Continued)

- **Sit as far back as possible from the steering wheel while still maintaining comfortable control of your vehicle. A distance of at least 10" from your chest to the steering wheel is recommended. Failure to do so could result in air bag inflation injuries to the driver.**

⚠ WARNING

■ Seat adjustment

- **Do not adjust the seat while wearing seat belts. Moving the seat forward will cause strong pressure on the abdomen.**
- **Do not place your hand near the seat bottom or seat track while adjusting the seat. Your hand could get caught in the seat mechanism.**

Front seat adjustment - power

The front seat can be adjusted by using the control switches located on the doors. Before driving, adjust the seat to the proper position so as to easily control the steering wheel, pedals and switches on the instrument panel.

⚠ WARNING

The power seat is operable with the ignition OFF.

Therefore, children should never be left unattended in the vehicle.

⚠ CAUTION

- **The power seat is driven by an electric motor. Stop operating once the adjustment is completed, excessive operation may damage the electrical equipment.**
- **When in operation, the power seat consumes a large amount of electrical power. To prevent unnecessary charging system drain, don't adjust the power seat longer than necessary while the engine is not running.**
- **Do not operate two or more power seat control switches at the same time. Doing so may result in power seat motor or electrical component malfunction.**

Forward and backward

Push the control switch forward or backward to move the seat to the desired position. Release the switch once the seat reaches the desired position.

Seatback angle

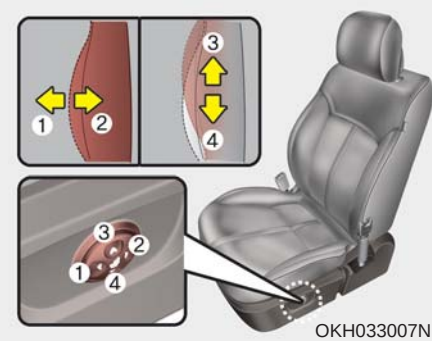
Push the control switch forward or backward to move the seatback to the desired angle. Release the switch once the seat reaches the desired position.

Seat cushion height

OKH033006N

Pull the front portion of the control switch up to raise or down to lower the front part of the seat cushion. Pull the rear portion of the control switch up to raise or down to lower the rear part of the seat cushion. Release the switch once the seat reaches the desired position.

Lumbar support (for driver's seat)



OKH033007N

The lumbar support can be adjusted by pressing the lumbar support switch on the side of the drivers seat. Press the front portion of the switch (1) to increase support, or the rear portion of the switch (2), to decrease support.

Move the support position up and down by pressing the switch (3) or (4).

Release the switch once the seat reaches the desired position.

Cushion length adjustment (for driver's seat)

OKH033004N

Push the control switch forward or backward to move the seat cushion to the desired length. Release the switch once the seat cushion reaches the desired length.

Driver position memory system

OKH043039N

A driver position memory system is provided to store and recall the driver seat, outside rearview mirror, HUD* (Head-Up Display), bright ness of the instrument cluster illumination and steering wheel positions with a simple button operation.

* : if equipped

By saving the desired positions into the system memory, different drivers can reposition the driver seat, outside rearview mirror and steering wheel based upon their driving preference. If the battery is disconnected, the position memory will be lost and the driving positions should be restored in the system.

⚠ WARNING

Never attempt to operate the driver position memory system while the vehicle is moving.

This could result in loss of control, and an accident causing death, serious injury, or property damage.

Storing positions into memory using the buttons on the door

Storing driver's seat positions

1. Check that the shift lever is in P (Park) and the Engine Start/Stop Button is in the ON position.
2. Adjust the driver seat, outside rearview mirror, HUD* (Head-up Display), bright ness of the instrument cluster illumination and steering wheel to positions comfortable for the driver.
3. Press the SET button on the control panel. The system will beep once.
4. Press one of the memory buttons (1 or 2) within 5 seconds after pressing the SET button. The system will beep twice when memory has been successfully stored.

* : if equipped

Recalling positions from memory

1 Check that the shift lever is in P (Park) and the Engine Start/Stop Button is in the ON position.

2. To recall the position in memory, press the desired memory button (1 or 2). The system will beep once, then the driver seat, outside rearview mirror and steering wheel will automatically adjust to the stored positions.

Adjusting the control switch for the driver seat while the system is recalling the stored position will cause the movement to stop and move in the direction that the control switch is moved.

⚠ WARNING

Use caution when recalling adjustment memory while sitting in the vehicle. Push the seat position control switch to the desired position immediately if the seat moves too far in any direction.

Easy access function

When exiting the vehicle, the steering wheel will move away from the driver and the seat will move rearward when the engine is turned off.

When entering the vehicle, the steering wheel will move toward the driver and the seat will move forward when the Engine Start/Stop Button is pressed to the ACC position or START position.

You can activate or deactivate this feature. Refer to "User settings" in chapter 4.

Headrest (for front seat)

OKH033109N

The driver's and front passenger's seats are equipped with a headrest for the occupant's safety and comfort.

The headrest not only provides comfort for the driver and front passenger, but also helps protect the head and neck in the event of a collision.

For maximum effectiveness in case of an accident, the headrest should be adjusted so the middle of the headrest is at the same height of the center of gravity of an occupant's head. Generally, the center of gravity of most people's head is similar with the height of the top of their eyes. Also, adjust the headrest as close to your head as possible.

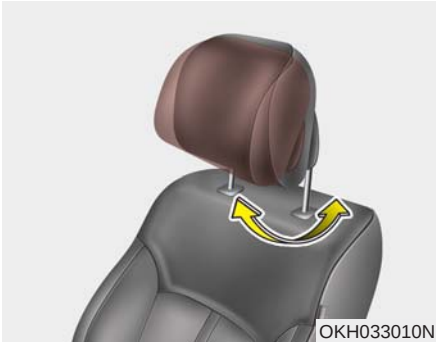
For this reason, the use of a cushion that holds the body away from the seatback is not recommended.

⚠ WARNING

■ Headrest removal/adjustment

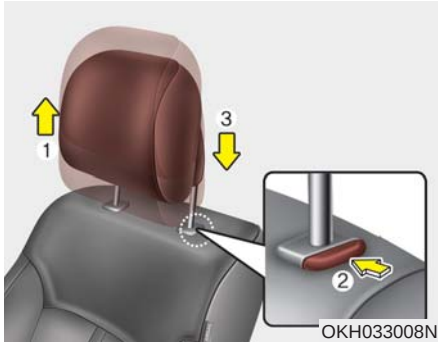
- **Do not operate the vehicle with the headrests removed. Headrests help provide critical neck and head support in a crash.**
- **Do not adjust the headrest height while the vehicle is in motion. Driver may lose control of the vehicle.**

Forward and backward adjustment


OKH033010N

The headrest may be adjusted forward or rearward by pulling the lower part of the headrest forward or rearward to the desired detent in the direction of the arrow. Adjust the headrest so that it properly supports the head and neck.

Adjusting the height up and down



OKH033008N

For manual type

To raise the headrest

1. Pull it up to the desired position (1).

To lower the headrest

1. Push and hold the release button (2) on the headrest support.
2. Lower the headrest to the desired position (3).

OKH033011N

For power type

To raise the headrest

1. Push the control switch up (1).

To lower the headrest

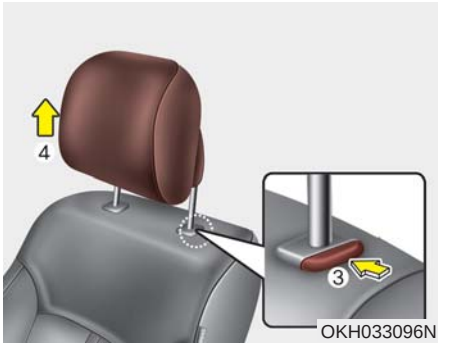
2. Push the control switch down (2).

Release the switch once the headrest reaches the desired position.

Removal

OKH033095N

1.Recline the seatback (2) with the recliner control switch (1).



OKH033096N

For manual type

2.Raise it as far as it can go.

3.Press the release button (3) while pulling upward (4).

OKH033098N

For power type

1.Raise it as far as it can go by pulling the switch up (3).

2.Pull the headrest up (4).

Installation

OKH033100N

1.Recline the seatback (2) with the recliner control switch (1).

OKH033101N

For manual type

2.Put the headrest poles (3) into the holes while pressing the release button (4).

3.Recline the seatback (6) with the recliner control switch (5).

4.Adjust the headrest to the appropriate height.

OKH033102N

For power type

2. Raise it as far as it can go by pulling the switch up (3).
3. Put the headrest poles (4) into the holes and then pull the switch down (5) until the headrest moves to the lowest position.
4. To install the headrest securely, move the headrest up and down 2 or 3 times by pulling the switch up and down.
5. Recline the seatback (7) with the recliner control switch (6).
6. Adjust the headrest to the appropriate height.

OKH033110N

Electronic active headrest

The electronic active headrest is designed to move the headrest forward and upward when impact sensor detects a rear impact.

This helps to prevent the driver's and front passenger's heads from moving backward during a collision.

⚠ CAUTION

Do not damage the Active Headrest. Headrests can provide critical neck and head support in a crash.

Rear seat adjustment - for power seat (if equipped)

The rear seat can be adjusted by using the control switches located on the door.

⚠ WARNING

The power seat is operable with the Engine Start/Stop Button in OFF.

Therefore, children should never be left unattended in the vehicle.

⚠ CAUTION

- **The power seat is driven by electric motors. Stop operating once the adjustment is completed. Excessive operation may damage the electrical equipment.**
- **When in operation, the power seat consumes a large amount of electrical power. To prevent unnecessary battery drain, don't adjust the power seat longer than necessary while the engine is not running.**
- **Do not operate two or more power seat control switches at the same time. Doing so may result in power seat motor or electrical component malfunction.**

⚠ WARNING

Use extreme caution so that hands or other objects are not caught in the seat mechanisms while the seat is moving.

Do not adjust the seat while wearing seat belts. Moving the seat cushion forward may cause strong pressure on the abdomen.

⚠ WARNING

Do not operate the rear power seat while the child seat is installed.

Forward, backward and seatback angle (for power seat)

OKH033035N

Push the control switch forward or backward to move the seat to the desired position. Release the switch once the seat reaches the desired position.

Easy access switch (for power seat)

OKH033036N

Your vehicle features an easy access system to provide convenient access for rear passengers. When opening the rear door, the rear seats will move rearward automatically to provide easier access for passengers. This easy access system will operate only when the control switch is in "ON" position.

Additional switches for adjusting the front passenger seat (if equipped)

OKH033037N

The switch is located in the armrest of the rear seat.

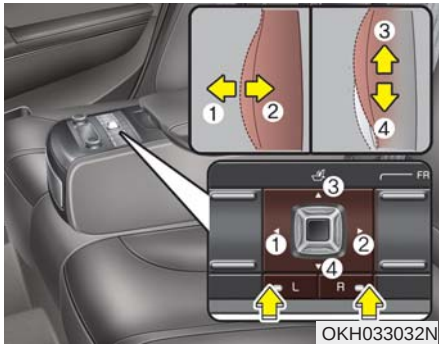
To adjust the position of front passenger's seat ;

Press the control switch forward (1) or rearward (2) to move the seat to the desired position.

Press the control switch forward (3) or rearward (4) to move the seatback to the desired angle.

Do not use these switches while the front passenger seat is occupied.

Lumbar support (for rear right and left passenger's seat) (if equipped)



OKH033032N

• For right side :

Press the R switch.

The lumbar support can be adjusted by pushing the lumbar support lever.

Push the lever to left side (1) increase support or push the lever to the right side (2) to decrease support.

To move the support position up or down, push the lever upside (3) or down side (4).

• For left side :

Press the L switch.

The lumbar support can be adjusted by pushing the lumbar support lever.

Push the lever to left side (1) increase support or push the lever to the right side (2) to decrease support.

To move the support position up or down, push the lever upside (3) or down side (4).

Rear switches operating limitation

OKH033040N

You can activate or deactivate the rear seat control, rear audio control and climate control by using the REAR LOCK button on the rear armrest or "System Settings" in the AVN (Audio, Video, and Navigation).

Detailed information for the "System Settings" is described in a separately supplied manual.

If the rear control button has deactivated through AVN, you can reactivate the rear control button only through AVN.

Headrest (for rear seat)

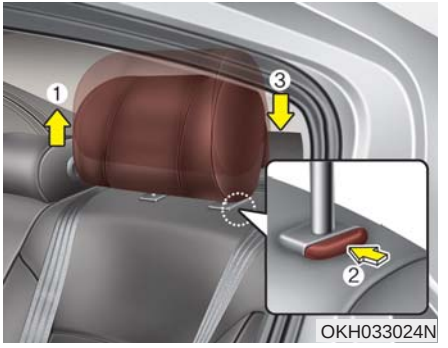
OKH033111N

The rear seat is equipped with headrests in all the seating positions for the occupant's safety and comfort.

The headrest not only provides comfort for passengers, but also helps protect the head and neck in the event of a collision.

For maximum effectiveness in case of an accident, the headrest should be adjusted so the middle of the headrest is at the same height of the center of gravity of an occupant's head. Generally, the center of gravity of most people's head is similar with the height as the top of their eyes.

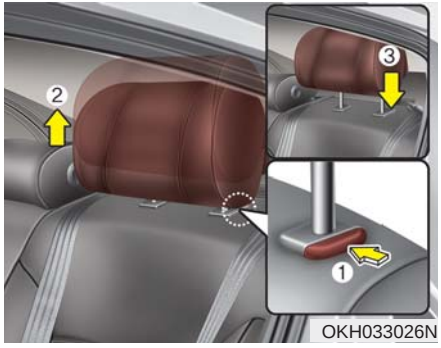
Also adjust the headrest as close to your head as possible. For this reason, the use of a cushion that holds the body away from the seatback is not recommended.



OKH033024N

Adjusting the height up and down

To raise the headrest, pull it up to the desired position (1). To lower the headrest, push and hold the release button (2) on the headrest support and lower the headrest to the desired position (3).



Removal and installation (for power seat)

To remove the headrest move the seat forward as much as possible. Raise it as far as it can go then press the release button (1) while pulling the headrest up (2).

To reinstall the headrest move the seat forward as much as possible. Put the headrest poles (3) into the holes while pressing the release button (1). Then adjust it to the appropriate height (2).

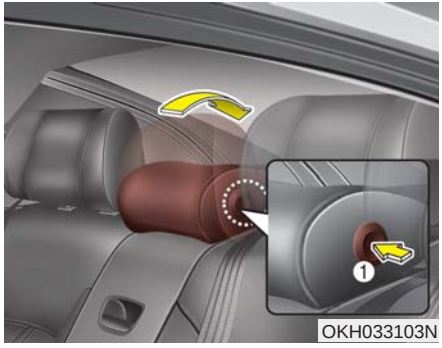
⚠ WARNING

Do not operate the vehicle with the headrests removed.

Headrests may provide critical neck and head support in a crash.

⚠ WARNING

Make sure the headrest locks in position after adjusting it to properly protects the occupants.



Rear center seat headrest

You can fold the rear center seat's headrest by pressing the upper part of the headrest while pushing the button (1).

To use the headrest, pull up the upper part of the headrest.

⚠ WARNING

Do not operate the vehicle with the headrest folded.

Headrest may provide critical neck and head support in a crash when properly adjusted.

Forward and backward adjustment

The headrest may be adjusted forward or backward by pulling the lower part of the headrest forward or backward to the desired detent in the direction of the arrow. Adjust the headrest so that it properly supports the head and neck.

Wing-out (if equipped)

For rear outboard passenger's comfort, the ends of the headrest can be adjusted inward.

Armrest

To use the armrest, pull it forward from the seatback.

Carrying long / narrow cargo (for fixed seat, if equipped)

Additional cargo space is provided to accommodate long/narrow cargo (skis, poles, etc.) not able to fit properly in the trunk when closed.

1. Pull the armrest down.
2. Pull the cover down while pushing the release lever down.

⚠ CAUTION

- **Be careful when loading cargo through the rear passenger seats to prevent damage to the vehicle interior.**
- **When cargo is loaded through the rear passenger seats, ensure the cargo is properly secured to prevent it from moving while driving. Unsecured cargo in the passenger compartment can cause damage to the vehicle or injury to it's occupants.**

⚠ WARNING

■ Cargo

Cargo should always be secured to prevent it from being thrown about the vehicle in a collision and causing injury to the vehicle occupants. Do not place objects on the rear seats, since they cannot be properly secured and may hit the front seat occupants in a collision.

SEAT BELTS

Seat belt restraint system

Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the pelvis, chest and shoulders as applicable. wearing the lap section of the belt across the abdominal area must be avoided.

Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed.

A slack belt will greatly reduce the protection afforded to the wearer.

Care should be taken to avoid contamination of the webbing with polishes, oils and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.

- For maximum restraint system protection, the seat belts must always be used whenever the vehicle is moving. A properly positioned shoulder belt should be positioned midway over your shoulder across your collarbone.
- Never allow children to ride in the front passenger seat. See child restraint system section for further discussion.

⚠ WARNING

■ Shoulder belt

Never wear the shoulder belt under your arm or behind your back. An improperly positioned shoulder belt cannot protect the occupant in a crash.

⚠ WARNING

■ Damaged seat belt

Replace the entire seat belt assembly if any part of the webbing or hardware is damaged as you can no longer be sure that a damaged seat belt will provide protection in a crash.

⚠ WARNING

■ Twisted seat belt

Make sure your seat belt is not twisted when worn. A twisted seat belt may not properly protect you in an accident and could even cut into your body.

⚠ WARNING

■ Seat belt buckle

Do not allow foreign material (gum, crumbs, coins, etc.) to obstruct the seat belt buckle. This may prevent the seat belt from fastening securely.

Seat belt warning (for driver's seat)

The driver's seat belt warning light and chime will activate to the following table when the ignition switch is in "ON" position.

Conditions		Warning Pattern	
Seat Belt	**Vehicle Speed**	**Light-Blink**	**Chime-Sound**
Unbuckled		6 seconds	
Buckled		6 seconds	None
Buckled → Unbuckled	Below 3 mph (5 km/h)	6 seconds	None
	3 mph~ 6 mph	6 seconds	
	Above 6 mph (10 km/h)	6 sec. on / 24 sec. off (11 times)	
Unbuckled	Above 6 mph (10 km/h) ↓ Below 3 mph (5 km/h)	6 seconds *1 ↓ Stop *2	

*1 Warning pattern repeats 11 times with an interval of 24 seconds. If the driver's seat belt is buckled, the light will stop within 6 seconds and chime will stop immediately.

*2 The light will stop within 6 seconds and chime will stop immediately.

Seat belt warning (for front passenger's seat)

The front passenger's seat belt warning light will activate to the following table when the ignition switch is in "ON" position.

Conditions		Warning Pattern
Seat Belt	**Vehicle Speed**	**Light-Blink**
Unbuckled		6 seconds
Unbuckled	Above 6mph (10 km/h)	Continuously
Buckled		6 seconds
Buckled → Unbuckled	Above 6mph (10 km/h)	Continuously *1
	Below 6mph (10 km/h)	None

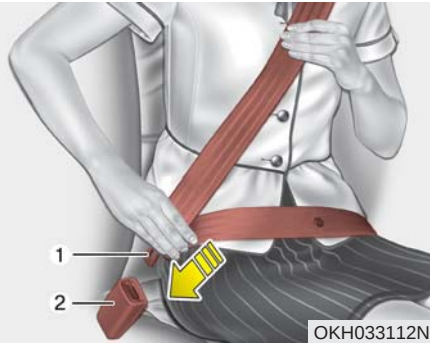
*1 The seat belt warning light will go off if the vehicle speed decreases below 3 mph (5 km/h). If the vehicle speed increases above 3 mph (5 km/h), the warning light will blink again.

⚠ WARNING

Riding in an improper position adversely affects the front passenger's seat belt warning system. It is important for the driver to instruct the passenger as to the proper seating instructions as contained in this manual.

- You can find the front passenger's seat belt warning light on the center fascia panel.
- Although the front passenger seat is not occupied, the seat belt warning light will blink for 6 seconds.
- The seat belt warning light can blink when a briefcase or purse is placed on the front passenger seat.

Seat belt - Driver's 3-point system with emergency locking retractor



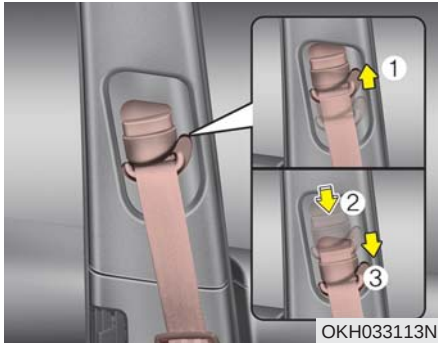
To fasten your seat belt:

To fasten your seat belt, pull it out of the retractor and insert the metal tab (1) into the buckle (2). There will be an audible "click" when the tab locks into the buckle.

The seat belt automatically adjusts to the proper length only after the lap belt portion is adjusted manually so that it fits snugly around your hips. If you lean forward in a slow, easy motion, the belt will extend and let you move around. If there is a sudden stop or impact, however, the belt will lock into position.

It will also lock if you try to lean forward too quickly.

If you are unable to pull out the seat belt from the retractor, firmly pull the belt out and release it. Then you will be able to pull the belt out smoothly.



Height adjustment

You can adjust the height of the shoulder belt anchor to one of the 4 positions for maximum comfort and safety.

The height of the adjusting seat belt should not be too close to your neck. The shoulder portion should be adjusted so that it lies across your chest and midway over your shoulder nearest the door and not your neck.

To adjust the height of the seat belt anchor, lower or raise the height adjuster into an appropriate position.

To raise the height adjuster, pull it up (1). To lower it, push it down (3) while pressing the height adjuster button (2).

Release the button to lock the anchor into position. Try sliding the height adjuster to make sure that it has locked into position.

⚠ WARNING

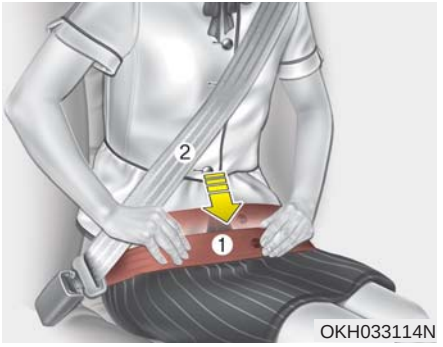
■ Shoulder belt positioning

Never position the shoulder belt across your neck or face.

⚠ WARNING

■ Seat belt replacement

Replace your seat belts after being in an accident. Failure to replace seat belts after an accident could leave you with damaged seat belts that will not provide protection in the event of another collision.



You should place the lap belt portion as low as possible and snugly across your hips. If the lap belt is located too high on your waist, it may increase the chance of injury in the event of a collision.

The arm closest to the seat belt buckle should be over the belt while the other arm should be under the belt as shown in the illustration.

Seat belts - Front passenger and rear seat 3-point system with combination locking retractor

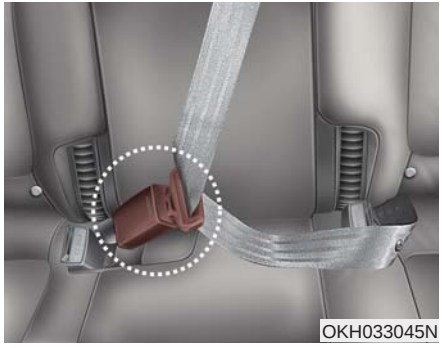
To fasten your seat belt

Combination retractor type seat belts are installed in the rear seat positions to help accommodate the installation of child restraint systems. Although a combination retractor is also installed in the front passenger seat position, it is strongly recommended that children always be seated in the rear seat. NEVER place an infant restraint system in the front seat of the vehicle.

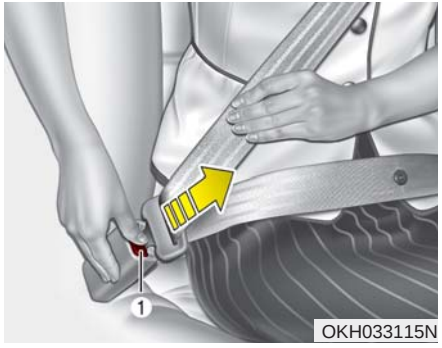
This type of seat belt combines the features of both an emergency locking retractor seat belt and an automatic locking retractor seat belt. To fasten your seat belt, pull it out of the retractor and insert the metal tab into the buckle. There will be an audible "click" when the tab locks into the buckle. When not securing a child restraint, the seat belt operates in the same way as the driver's seat belt (Emergency Locking Retractor Type). It automatically adjusts to the proper length only after the lap belt portion of the seat belt is adjusted manually so that it fits snugly around your hips.

When the seat belt is fully extended from the retractor to allow the installation of a child restraint system, the seat belt operation changes to allow the belt to retract, but not to extend (Automatic Locking Retractor Type). Refer to “Using a child restraint system” in this chapter.

To convert from the automatic locking feature to the emergency locking operation mode, allow the unbuckled seat belt to fully retract.



When using the rear center seat belt, the buckle with the “CENTER” mark must be used.



To release the seat belt

The seat belt is released by pressing the release button (1) of the locking buckle. When it is released, the belt should automatically draw back into the retractor.

If this does not happen, check the belt to be sure it is not twisted, then try again.

Pre-tensioner seat belt

Your vehicle is equipped with driver's and front passenger's pre-tensioner seat belts (retractor pretensioner and EFD (Emergency Fastening Device). The pre-tensioner seat belts may be activated, when a frontal collision is severe enough, together with the air bags.

When the vehicle stops suddenly, or if the occupant tries to lean forward too quickly, the seat belt retractor may lock into position. In certain frontal collisions, the pre-tensioner will activate and pull the seat belt into tighter contact against the occupant's body.

(1) Retractor Pretensioner

The retractor pre-tensioner is a supplemental system of the seat belts.

The purpose of the retractor pre-tensioner is to make sure that the shoulder belts fit in tightly against the occupant's upper body in certain frontal collisions.

(2) EFD (Emergency Fastening Device)

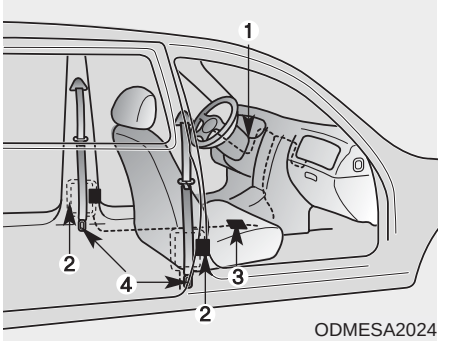
The Emergency Fastening Device (EFD) is a supplemental system of the seat belts.

The purpose of the EFD is to make sure that the pelvis belts fit in tightly against the occupant's lower body in certain frontal collisions.

If the system senses excessive tension on the driver or passenger's seat belt when the pre-tensioner system activates, the load limiter inside the retractor pre-tensioner will release some of the pressure on the affected seat belt.

⚠ WARNING

- **Do not put anything near the buckle. Placing objects near the buckle may increase the risk of personal injury in the event of a collision.**
- **For your safety, be sure that the belt webbing is not loose or twisted and always sit properly on your seat.**



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The seat belt pre-tensioner system consists mainly of the following components. Their locations are shown in the illustration:

1. SRS air bag warning light
2. Retractor pre-tensioner assembly
3. SRS control module
4. Emergency fastening device (EFD)

⚠ WARNING

To obtain maximum benefit from a pre-tensioner seat belt:

1. **The seat belt must be worn correctly and adjusted to the proper position. Please read and follow all of the important information and precautions about your vehicle's occupant safety features – including seat belts and air bags – that are provided in this manual.**
2. **Be sure you and your passengers always wear seat belts properly.**

✻ NOTICE

- **Both the driver's and front passenger's seat belt pre-tensioner system may be activated not only in certain frontal collision but also in certain side collision or rollover, if the vehicle is equipped with a side or curtain air bag.**
- **When the pre-tensioner seat belts are activated, a loud noise may be heard and fine dust, which may appear to be smoke, may be visible in the passenger compartment. These are normal operating conditions and are not hazardous.**
- **Although it is harmless, the fine dust may cause skin irritation and should not be breathed for prolonged periods. Wash all exposed skin areas thoroughly after an accident in which the pre-tensioner seat belts were activated.**
- **Because the sensor that activates the SRS air bag is connected with the pre-tensioner seat belt, the SRS air bag warning light on the instrument panel will illuminate for approximately 6 seconds after the ignition switch has been turned to the ON position, and then it should turn off.**

⚠ CAUTION

If the pre-tensioner seat belt system are not working properly, this warning light will illuminate even if there is no malfunction of the SRS air bag. If the SRS air bag warning light does not illuminate when the ignition switch is turned ON, or if it remains illuminated after illuminating for approximately 6 seconds, or if it illuminates while the vehicle is being driven, have an authorized authorized K900 Kia dealer inspect the pre-tensioner seat belt and SRS air bag system as soon as possible.

⚠ WARNING

- **Pre-tensioners are designed to operate only one time. After activation, pre-tensioner seat belts must be replaced. All seat belts, of any type, should always be replaced after they have been worn during a collision.**
- **The pre-tensioner seat belt assembly mechanisms become hot during activation. Do not touch the pre-tensioner seat belt assemblies for several minutes after they have been activated.**
- **Do not attempt to inspect or replace the pre-tensioner seat belts yourself. This must be done by an authorized K900 Kia dealer.**
- **Do not strike the pre-tensioner seat belt assemblies.**
- **Do not attempt to service or repair the pre-tensioner seat belt system in any manner.**

(Continued)

(Continued)

- **Improper handling of the pre-tensioner seat belt assemblies, and failure to heed the warnings not to strike, modify, inspect, replace, service or repair the pre-tensioner seat belt assemblies may lead to improper operation or inadvertent activation and serious injury.**
- **Always wear the seat belts when driving or riding in a motor vehicle.**
- **If the vehicle or pre-tensioner seat belt must be discarded, contact an authorized K900 Kia dealer.**

Pre-Safe Seat belt (PSB) (if equipped)

OKH033116N

The pre-safe seat belt will activate and pull the seat belt into tighter contact against the occupant's body if a collision is detected or during certain driving maneuvers.

⚠ CAUTION

The pre-safe seat belt activates only when the passenger is wearing his/her seat belt.

■ Type A ■ Type B

OKH053117N

The pre-safe seat belt warning light will illuminate if there is a problem with your pre-safe seat belt.

Have the system checked if:

- The light does not turn on briefly when you turn the engine start/stop button to the ON position.
- The light stays on after illumination for approximately 3 seconds.
- The light comes on while the vehicle is in motion.

The pre-safe seat belt system operates as below

- The seat belt is tightened when:
  - The vehicle senses a collision
  - Emergency braking situation occurs
  - Loss of vehicle control
- The seat belt vibrates when:
  - The vehicle detects and object too close to the vehicle

Seat belt precautions

Infant or small child

All 50 states have child restraint laws. You should be aware of the specific requirements in your state. Child and/or infant seats must be properly placed and installed in the rear seat. For more information about the use of these restraints, refer to “Child restraint system” in this chapter.

Larger children

Children who are too large for child restraint systems should always occupy the rear seat and use the available lap/shoulder belts. The lap portion should be fastened snug on the hips and as low as possible. Periodically check belt fit. A child's squirming could put the belt out of position. Children are given the most safety in the event of an accident when they are restrained by a proper restraint system in the rear seat. If a larger child (over age 12) must be seated in the front seat, the child should be securely restrained by the available lap/shoulder belt and the seat should be placed in the rearmost position. Children age 12 and under should be restrained securely in the rear seat. NEVER place a child age 12 and under in the front seat. NEVER place a rear facing child seat in the front seat of a vehicle.

If the shoulder belt portion slightly touches the child's neck or face, try placing the child closer to the center of the vehicle. If the shoulder belt still touches their face or neck they need to be returned to a child restraint system.

⚠ WARNING

■ Small children

Do not allow small children to ride in the vehicle without an appropriate child restraint system.

Restraint of pregnant women

Pregnant women should wear lap/shoulder belt assemblies whenever possible according to specific recommendations by their doctors. The lap portion of the belt should be worn AS SNUGLY AND LOW AS POSSIBLE on the hips, not across the abdomen.

⚠ WARNING

■ Pregnant women

Pregnant women must never place the lap portion of the seat belt above or on the abdomen where the fetus is located. The force of the seat belt during a collision will crush the fetus.

Injured person

A seat belt should be used when an injured person is being transported. When this is necessary, you should consult a physician for recommendations.

One person per belt

Two people (including children) should never attempt to use a single seat belt. This could increase the severity of injuries in case of an accident.

Do not lie down

To reduce the chance of injuries in the event of an accident and to achieve maximum effectiveness of the restraint system, all passengers should be sitting up and the front seats should be in an upright position when the vehicle is moving. A seat belt cannot provide proper protection if the person is lying down in the rear seat or if the front seat is in a reclined position.

Care of seat belts

Seat belt systems should never be disassembled or modified. In addition, care should be taken to assure that seat belts and belt hardware are not damaged by seat hinges, doors or other abuse.

Periodic inspection

All seat belts should be inspected periodically for wear or damage of any kind. Any damaged parts should be replaced as soon as possible.

Keep belts clean and dry

Seat belts should be kept clean and dry. If belts become dirty, they can be cleaned by using a mild soap solution and warm water. Bleach, dye, strong detergents or abrasives should not be used because they may damage and weaken the fabric.

When to replace seat belts

The entire in-use seat belt assembly or assemblies should be replaced if the vehicle has been involved in an accident. This should be done even if no damage is visible. Additional questions concerning seat belt operation should be directed to an authorized K900 Kia dealer.

CHILD RESTRAINT SYSTEM

Children riding in the car should sit in the rear seat and must always be properly restrained to minimize the risk of injury in an accident, sudden stop or sudden maneuver. According to accident statistics, children are safer when properly restrained in the rear seats than in the front seat. Larger children who are not in a child restraint should use one of the seat belts provided.

You should be aware of the specific requirements in your state. Child and/or infant safety seats must be properly placed and installed in the rear seat. You must use a commercially available child restraint system that meets the requirements of the Federal Motor Vehicle Safety Standards (FMVSS).

Child restraint systems are designed to be secured in vehicle seats by seat belt, or by a tether anchor and/or LATCH anchors (if equipped).

Children could be injured or killed in a crash if their restraints are not properly secured. For small children and babies, a child seat or infant seat must be used. Before buying a particular child restraint system, make sure it fits your car seat and seat belts, and fits your child. Follow all the instructions provided by the manufacturer when installing the child restraint system.

⚠ WARNING

■ Restraint location

Never install a child or infant seat on the front passenger's seat.

A child riding in the front passenger seat can be forcefully struck by an inflating air bag.

⚠ WARNING

■ Hot child restraint

A child restraint system can become very hot if it is left in a closed vehicle on a sunny day. Be sure to check the seat cover, buckles and latches before placing a child in the restraint system.

When the child restraint system is not in use, store it in the luggage area or fasten it with a seat belt so that it will not be thrown forward in case of a sudden stop or an accident.

⚠ WARNING

■ Holding children

Never hold a child in your arms or lap when riding in a vehicle. The violent forces created during a crash will tear the child from your arms and throw the child against the car's interior.

Always use a child restraint system which is appropriate for your child's height and weight.

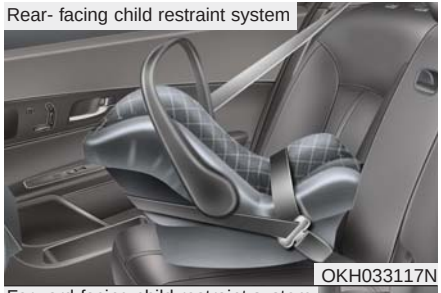
⚠ WARNING

■ Seat belt use

Do not use one seat belt for two occupants at the same time. This will eliminate any safety benefit provided by the seat belt to the occupants.

Using a child restraint system

Rear- facing child restraint system



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Forward-facing child restraint system

OKH033047N

For small children and babies, the use of a child seat or infant seat is required. This child seat or infant seat should be of appropriate size for the child and should be installed in accordance with the manufacturer's instructions.

For safety reasons, we recommend that the child restraint system be used in the rear seats.

Since all passenger seat belts move freely under normal conditions and only lock under extreme or emergency conditions (emergency lock mode), you must manually change these seat belts to the auto lock mode to secure a child restraint.

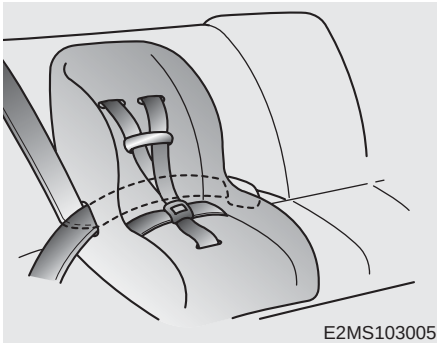
If the seat belt does not operate as described in this chapter, have the system checked immediately by your authorized K900 Kia dealer.

⚠ WARNING

■ Child seat installation

- **Always follow the instructions provided by the child restraint system manufacturer. Child restraint system manufacturers know their products best.**
- **Failure to observe this manual's instructions regarding child restraint system and the instructions provided with the child restraint system could result in the improper installation of the child restraint system which may reduce the protection to your child in a crash or a sudden stop.**

Placing a passenger seat belt into the auto lock mode



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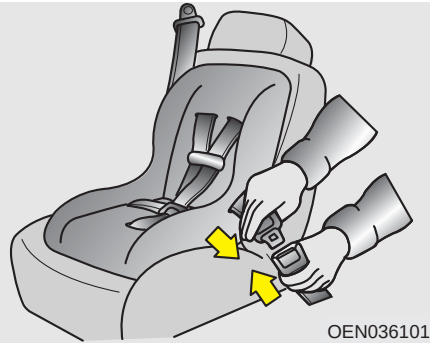
The auto lock mode will help prevent the normal movement of the child in the vehicle from causing the seat belt to loosen and compromise the child restraint system. To secure a child restraint system, use the following procedure.

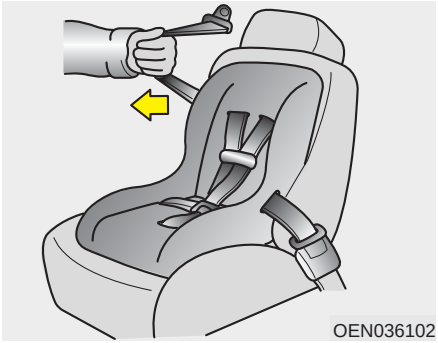


OEN036101

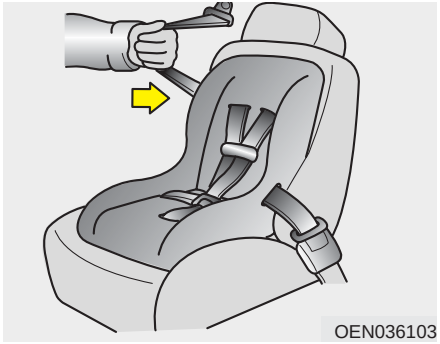
To install a child restraint system on the outboard or center rear seats, do the following:

1. Place the child restraint system in the seat and route the lap/shoulder belt around or through the restraint, following the restraint manufacturer's instructions. Be sure the seat belt webbing is not twisted.
2. Fasten the lap/shoulder belt latch into the buckle. Listen for the distinct "click" sound.

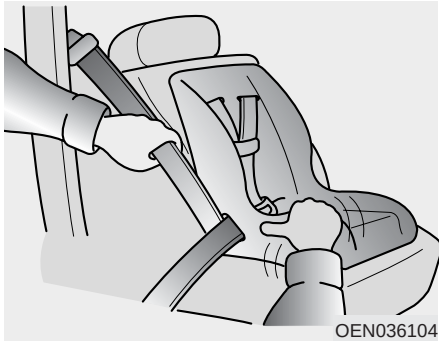
Position the release button so that it is easy to access in case of an emergency.



3. Pull the shoulder portion of the seat belt all the way out. When the shoulder portion of the seat belt is fully extended, it will shift the retractor to the “Auto Lock” (child restraint) mode.



4. Slowly allow the shoulder portion of the seat belt to retract and listen for an audible “clicking” or “ratcheting” sound. This indicates that the retractor is in the “Auto Lock” mode. If no distinct sound is heard, repeat steps 3 and 4.



5. Remove as much slack from the belt as possible by pushing down on the child restraint system while feeding the shoulder belt back into the retractor.
6. Push and pull on the child restraint system to confirm that the seat belt is holding it firmly in place. If it is not, release the seat belt and repeat steps 2 through 6.
7. Double check that the retractor is in the “Auto Lock” mode by attempting to pull more of the seat belt out of the retractor. If you cannot, the retractor is in the “Auto Lock” mode.

The lap/shoulder belt automatically returns to the “emergency lock mode” whenever the belt is allowed to retract fully.

Therefore, the preceding seven steps must be followed each time a child restraint is installed.

To remove the child restraint, press the release button on the buckle and then pull the lap/shoulder belt out of the restraint and allow the seat belt to retract fully.

⚠ WARNING

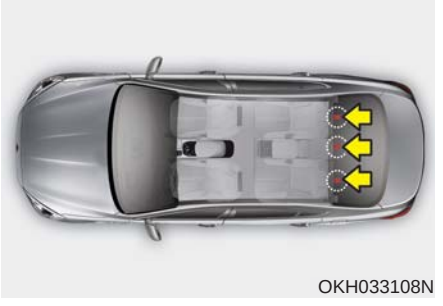
■ Auto lock mode

Set the retractor to Automatic Lock mode when installing any child restraint system.

If the retractor is not in the Auto Lock mode, the child restraint can move when your vehicle turns or stops suddenly.

Securing a child restraint seat with tether anchorage system

OKH033048N


OKH033108N

Child restraint hook holders are located on the package tray.

This symbol indicates the position of the tether anchor.

OKH033050N

1. Route the child restraint seat strap over the seatback.

   For vehicles with adjustable headrest, route the tether strap under the headrest and between the headrest posts, otherwise route the tether strap over the top of the seatback. In case of interference between the child restraint seat and the headrest remove the particular head restraint for better fitment of the child restraint seat.

2.Connect the tether strap hook to the appropriate child restraint hook holder and tighten to secure the child restraint seat.

⚠ WARNING

■ Tether strap

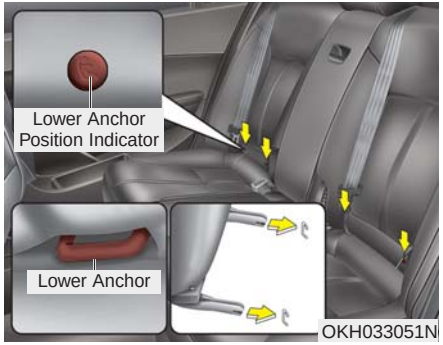
Never mount more than one child restraint to a single tether or to a single lower anchorage point. The increased load caused by multiple seats may cause the tethers or anchorage points to break.

Check that the child restraint system is secure by pushing and pulling it in different directions. Incorrectly fitted child restraints may swing, twist, tip or separate causing death or serious injury.

Securing a child restraint seat with child seat lower anchor system

OKH033118N

Some child seat manufacturers make child restraint seats that are labeled as LATCH or LATCH-compatible child restraint seats. LATCH stands for "Lower Anchors and Tethers for Children". These seats include two rigid or webbing mounted attachments that connect to two LATCH anchors at specific seating positions in your vehicle. This type of child restraint seat eliminates the need to use seat belts to attach the child seat in the rear seats.



OKH033051N

Child restraint symbols are located on the left and right rear seat backs to indicate the position of the lower anchors for child restraints.

⚠ WARNING

■ Unused rear seatbelts

Always fasten the seatbelts behind the child restraint seat when they are not used to secure the child seat. Failure to do so may result in child strangulation.

LATCH anchors have been provided in your vehicle. The LATCH anchors are located in the left and right outboard rear seating positions. Their locations are shown in the illustration. There is no LATCH anchor provided for the center rear seating position.

The LATCH anchors are located between the seatback and the seat cushion of the rear seat left and right outboard seating positions.

When you install your child's restraint system using the LATCH anchors buckle the shoulder lap belt, then lock the retractor and pull the belt to remove the slack in the belt so it lies flat against the vehicle seat.

Follow the child seat manufacturer's instructions to properly install child restraint seats with LATCH or LATCH-compatible attachments.

Once you have installed the LATCH child restraint, assure that the seat is properly attached to the LATCH and tether anchors.

Also, test the child restraint seat before you place the child in it. Tilt the seat from side to side. Also try to tug the seat forward. Check to see if the anchors hold the seat in place.

⚠ WARNING

■ LATCH lower anchors

Never attempt to attach a LATCH equipped seat in the center seating position. LATCH lower anchors are only to be used with the left and right rear outboard seating positions. You may damage the anchors or the anchors may fail and break in a collision.

⚠ WARNING

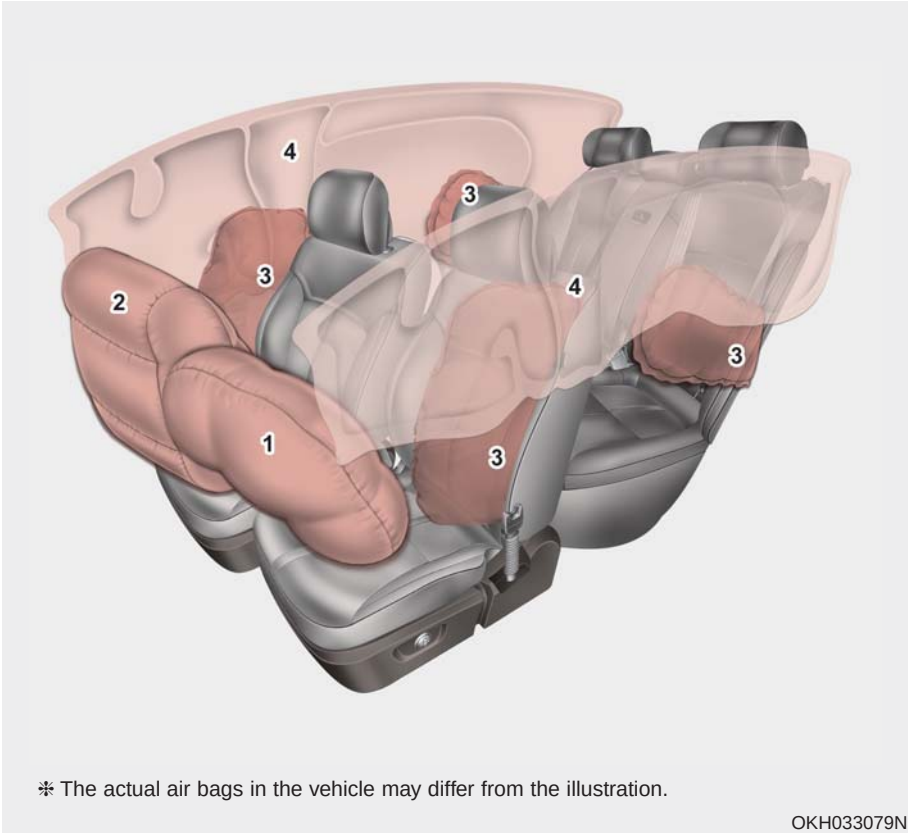
■ Weight for LATCH system

The recommended weight for the LATCH system is under 65lb.

How to calculate the child restraint weight :

Child restraint weight =
65lb - Child weight

AIR BAG - ADVANCED SUPPLEMENTAL RESTRAINT SYSTEM



❈ The actual air bags in the vehicle may differ from the illustration.

OKH033079N

(1) Driver's front air bag
(2) Passenger's front air bag
(3) Side air bag
(4) Curtain air bag

Even in vehicles with air bags, you and your passengers must always wear the safety belts provided in order to minimize the risk and severity of injury in the event of a collision or rollover.

How does the air bag system operate

- Air bags are activated (able to inflate if necessary) only when the ignition switch is turned to the ON or engine is running.
- Air bags inflate instantly in the event of serious frontal or side collision (if equipped with side air bag or curtain air bag) in order to help protect the occupants from serious physical injury.
- There is no single speed at which the air bags will inflate.

  Generally, air bags are designed to inflate based upon the severity of a collision and its direction. These two factors determine whether the sensors produce an electronic deployment/ inflation signal.
- Air bag deployment depends on a number of complex factors including vehicle speed, angles of impact and the density and stiffness of the vehicles or objects which your vehicle hits in the collision. Though, factors are not limited to those mentioned above.
- The front air bags will completely inflate and deflate in an instant.

  It is virtually impossible for you to see the air bags inflate during an accident. It is much more likely that you will simply see the deflated air bags hanging out of their storage compartments after the collision.
- In order to help provide protection in a severe collision, the air bags must inflate rapidly. The speed of air bag inflation is a consequence of extremely short time in which a collision occurs and the need to get the air bag between the occupant and the vehicle structures before the occupant impacts those structures. This speed of inflation reduces the risk of serious or life-threatening injuries in a severe collision and is thus a necessary part of air bag design.

  However, air bag inflation can also cause injuries which can include facial abrasions, bruises and broken bones because the inflation speed also causes the air bags to expand with a great deal of force.
- **There are even circumstances under which contact with the steering wheel air bag can cause fatal injuries, especially if the occupant is positioned excessively close to the steering wheel.**

Noise and smoke

When the air bags inflate, they make a loud noise and they leave smoke and powder in the air inside of the vehicle. This is normal and is a result of the ignition of the air bag inflator. After the air bag inflates, you may feel substantial discomfort in breathing due to the contact of your chest to both the seat belt and the air bag, as well as from breathing the smoke and powder. **Open your doors and/or windows as soon as possible after the impact in order to reduce discomfort and prevent prolonged exposure to smoke and powder.**

Though smoke and powder are non-toxic,They may cause irritation to the skin (eyes,nose and throat, etc). If this is the case, wash and rinse with cold water immediately and consult a doctor if the symptom persists.

⚠ WARNING

■ Hot components

Do not touch the air bag storage area's internal components immediately after air bag inflation. The air bag related parts in the steering wheel, instrument panel and the roof rails above the front and rear doors are very hot. Hot components can result in burn injuries.

Installing a child restraint on a front passenger's seat is forbidden

1JBH3051

Never place a rear-facing child restraint in the front passenger's seat. If the air bag deploys, it would impact the rear-facing child restraint, causing serious or fatal injury.

In addition, do not place front-facing child restraint in the front passenger's seat either. If the front passenger air bag inflates, it would cause serious or fatal injuries to the child.

⚠ WARNING

■ Air bag deployment

When children are seated in the rear outboard seats of a vehicle equipped with side and/or curtain air bags, install the child restraint system as far away from the door side as possible. Inflation of the side and/or curtain air bags could impact the child.

Air bag warning light

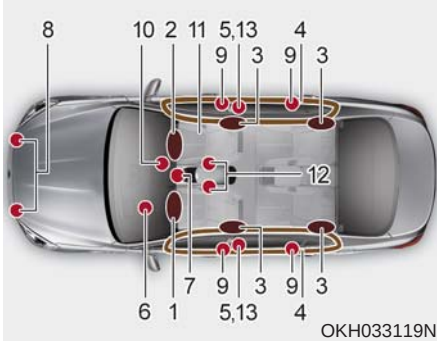
The purpose of the air bag warning light in your instrument panel is to alert you of a potential problem with your air bag - Supplemental Restraint System (SRS).

When the ignition switch is turned ON, the indicator light should illuminate for approximately 6 seconds, then go off.

Have the system checked by an authorized K900 Kia dealer if:

- The light does not turn on briefly when you turn the ignition ON.
- The light stays on after illuminating for approximately 6 seconds.
- The light comes on while the vehicle is in motion.

SRS components and functions



OKH033119N

The SRS consists of the following components:

1. Driver's front air bag module
2. Passenger's front air bag module
3. Side air bag modules
4. Curtain air bag modules
5. Retractor pre-tensioner assemblies
6. Air bag warning light
7. SRS control module (SRSCM)
8. Front impact sensors
9. Side impact sensors
10. PASSENGER AIR BAG “OFF” indicator (Front passenger’s seat only)
11. Occupant detection system (Front passenger’s seat only)
12. Driver’s and front passenger’s seat belt buckle sensors
13. Emergency fastening device (EFD)

The SRSCM continually monitors all SRS components while the ignition switch is ON to determine if a crash impact is severe enough to require air bag deployment or pre-tensioner seat belt deployment.

The SRS air bag warning light on the instrument panel will illuminate for about 6 seconds after the ignition switch is turned to the ON position, after which the air bag warning light should go out.

If any of the following conditions occurs, this indicates a malfunction of the SRS. Have an authorized K900 Kia dealer inspect the air bag system as soon as possible.

- The light does not turn on briefly when you turn the ignition ON.
- The light stays on after illuminating for approximately 6 seconds.
- The light comes on while the vehicle is in motion.

Driver's front air bag (1)

OKH033129N

The air bag modules are located both in the center of the steering wheel and in the front passenger's panel above the glove box. When the SRSCM detects a sufficiently severe impact to the front of the vehicle, it will automatically deploy the front air bags.

Driver's front air bag (2)

OKH033130N

Upon deployment, tear seams molded directly into the pad covers will separate under pressure from the expansion of the air bags. Further opening of the covers then allows full inflation of the air bags.

Driver's front air bag (3)

OKH033128N

A fully inflated air bag, in combination with a properly worn seat belt, slows the driver's or the passenger's forward motion, reducing the risk of head and chest injury.

After complete inflation, the air bag immediately starts deflating, enabling the driver to maintain forward visibility and the ability to steer or operate other controls.

Passenger's front air bag

OKH033132N

⚠ WARNING

■ Air bag obstructions

Do not install or place any accessories on the steering wheel, instrument panel, or on the front passenger's panel above the glove box in a vehicle Such objects may become dangerous projectiles if the air bag deploys.

✻ NOTICE

Before you replace a fuse or disconnect a battery terminal, turn the ignition switch to the LOCK position and remove the ignition key. Never remove or replace the air bag related fuse(s) when the ignition switch is in the ON position. Failure to heed this warning will cause the SRS air bag warning light to illuminate.

Occupant detection system

OKH033105N

Your vehicle is equipped with an occupant detection system in the front passenger's seat.

The occupant detection system is designed to detect the presence of a properly-seated front passenger and determine if the passenger's front air bag should be enabled (may inflate) or not. The driver's front air bag is not affected or controlled by the occupant detection system.

Main components of occupant detection system

- A detection device located within the front passenger seat track.
- Electronic system to determine whether passenger air bag systems should be activated or deactivated.
- An indicator light located on the instrument panel which illuminates the words PASSENGER AIR BAG “OFF” indicating the front passenger air bag system is deactivated.
- The instrument panel air bag warning light is interconnected with the occupant detection system.

If the front passenger seat is occupied by a person that the system determines to be of adult size, and he/she sits properly (sitting upright with the seatback in an upright position, centered on the seat cushion with their seat belt on, legs comfortably extended and their feet on the floor), the PASSENGER AIR BAG “OFF” indicator will turn off and the front passenger's air bag will be able to inflate, if necessary, in frontal crashes.

You will find the PASSENGER AIR BAG “OFF” indicator on the center facia panel. This system detects the conditions 1~4 in the following table and activates or deactivates the front passenger air bag based on these conditions.

Always be sure that you and all vehicle occupants are seated and restrained properly (sitting upright with the seat in an upright position, centered on the seat cushion, with the person’s legs comfortably extended, feet on the floor, and wearing the safety belt properly) for the most effective protection by the air bag and the safety belt.

- The ODS (Occupant Detection System) may not function properly if the passenger takes actions which can defeat the detection system. These include:

(1) Failing to sit in an upright position.

(2) Leaning against the door or center console.

(3) Sitting towards the sides or the front of the seat.

(4) Putting legs on the dashboard or resting them on other locations which reduce the passenger weight on the front seat.

(5) Improperly wearing the safety belt.

(6) Reclining the seat back.

(7) Wearing a thick cloth like ski wear or hip protection wear.

(8) Put on the seat an additional thick cushion.

Condition and operation in the front passenger occupant detection system

Condition detected by the occupant detection system	Indicator/Warning light		Devices
	PASSENGER AIR BAG "OFF" indicator light	SRS warning light	Front passenger air bag
1. Adult *1 or child age 13 and up *2	Off	Off	Activated
2. Infant or child restraint system with 12 months old *3 *4	On	Off	Deactivated
3. Unoccupied	On	Off	Deactivated
4. Malfunction in the system	Off	On	Activated

*1 : The system judges a person of adult size as an adult. When a smaller adult sits in the front passenger seat, the system may recognize him/her as a child depending on his/her physique and posture.

*2 : Do not allow children to ride in the front passenger seat. When a smaller child than the same age sits in the front passenger seat, the system may recognize him/her as an infant depending on his/her physique or posture.

*3 : Never install a child restraint system on the front passenger seat.

*4 : The PASSENGER AIR BAG "OFF" indicator may turn on or off when a child above 12 months to 12 years old (with or without child restraint system) sits in the front passenger seat. This is a normal condition.

⚠ WARNING

■ ODS system

Riding in an improper position adversely affects the occupant detection system (ODS) and may result in the deactivation of front passenger air bag. It is important for the driver to instruct the passenger as to the proper seating instructions as contained in this manual.

- **Never put a heavy load in the front passenger seat.**

- **Never excessively recline the front passenger seat-back.**

- **Never place the feet on the front passenger seat-back.**

- **Never place the feet on the dashboard.**

- **Never sit with the hips shifted towards the front of the seat.**

- **Never lean on the door or center console.**
- **Never sit on one side of the front passenger seat.**

OKH033131N

When an adult is seated in the front passenger seat, if the PASSENGER AIR BAG “OFF” indicator is on, turn the ignition switch to the LOCK position and ask the passenger to sit properly (sitting upright with the seat back in an upright position, centered on the seat cushion with their seat belt on, legs comfortably extended and their feet on the floor). Restart the engine and have the person remain in that position. This will allow the system to detect the person and to enable the passenger air bag.

If the PASSENGER AIR BAG “OFF” indicator is still on, ask the passenger to move to the rear seat.

⚠ WARNING

■ “AIR BAG OFF” light

Do not allow an adult passenger to ride in the front seat when the PASSENGER AIR BAG “OFF” indicator is illuminated, because the air bag will not deploy in the event of a crash. The driver must instruct the passenger to reposition himself in the seat. Failure to properly position yourself may lead to air bag deactivation resulting in air bag non-deployment and in a collision. If the PASSENGER AIR BAG “OFF” indicator remains illuminated after the passenger repositions themselves properly and the car is restarted, it is recommended that passenger move to the rear seat because the passenger's front air bag will not deploy.

✻ NOTICE

The PASSENGER AIR BAG “OFF” indicator illuminates for about 4 seconds after the ignition switch is turned to the ON position or after the engine is started. If the front passenger seat is occupied, the occupant detection sensor will then classify the front passenger after several more seconds.

⚠ WARNING

- **Do not put a heavy load or an electronic device (ex. laptop computer, after market DMB, navigation, satellite audio, video game machine, MP3, AC inverter and etc.) and sitting mat in the front passenger seatback pocket or on the front passenger seat. Do not hang onto the front passenger seat. Do not hang any items such as seatback table on the front passenger seatback. Do not place feet on the front passenger seatback. Do not place any items under the front passenger seat. Any of these could interfere with proper sensor operation or turn on the air bag warning light.**
- **Do not place sharp objects on the front passenger seat. These may damage the occupant detection system, if they puncture the seat cushion.**

(Continued)

(Continued)

- **Air bags can only be used once – have an authorized K900 Kia dealer replace the air bag immediately after deployment.**
- **The occupant detection system may not work properly if water, coffee or any other liquid including rain gets on the seat. Keep the front seat dry at all times.**

Any child age 12 and under should ride in the rear seat. Children too large for child restraints should use the available lap/shoulder belts. No matter what type of crash, children of all ages are safer when restrained in the rear seat.

✻ NOTICE

Do not modify or replace the front passenger seat. Don't place anything on or attach anything such as a blanket, front seat covers or after market seat heater to the front passenger seat. This can adversely affect the occupant detection system.

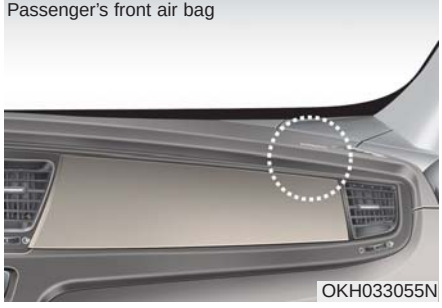
If the occupant detection system is not working properly, the SRS air bag warning light on the instrument panel will illuminate because the passenger's front air bag is connected with the occupant detection system. If there is a malfunction of the occupant detection system, the PASSENGER AIR BAG “OFF” indicator will not illuminate and the passenger's front air bag will inflate in frontal impact crashes even if there is no occupant in the front passenger's seat.

Driver's and passenger's front air bag

Driver's front air bag

OKH033053N

Passenger's front air bag



OKH033055N

Your vehicle is equipped with an Advanced Supplemental Restraint (Air Bag) System and lap/shoulder belts at both the driver and passenger seating position.

The indications of the system's presence are the letters "AIR BAG" embossed on the air bag pad cover in the steering wheel and the passenger's side front panel pad above the glove box.

The SRS consists of air bags installed under the pad covers in the center of the steering wheel and the passenger's side front panel above the glove box.

The purpose of the SRS is to provide the vehicle's driver and/or the front passenger with additional protection than that offered by the seat belt system alone in case of a frontal impact of sufficient severity. The SRS uses sensors to gather information about the driver's seat position, the driver's and front passenger's seat belt usage and impact severity.

The advanced SRS offers the ability to control the air bag inflation with two levels. A first stage level is provided for moderate-severity impacts. A second stage level is provided for more severe impacts.

The passenger's front air bag is designed to help reduce the injury of children sitting close to the instrument panel in low speed collisions. However, children are safer if they are restraint in the rear seat.

According to the impact severity, seating position and seat belt usage, the SRSCM (SRS Control Module) controls the air bag inflation. Failure to properly wear seat belts can increase the risk or severity of injury in an accident.

Additionally, your vehicle is equipped with an occupant detection system in the front passenger's seat. The occupant detection system detects the presence of a passenger in the front passenger's seat and will turn off the front passenger's air bag under certain conditions. For more detail, see "Occupant detection system" in this chapter.

Do not place any objects that may cause magnetic fields near the front seat. These may cause a malfunction of the seat track position sensor.

Manufacturers are required by government regulations to provide a contact point concerning modifications to the vehicle for persons with disabilities, which modifications may affect the vehicle's advanced air bag system. That contact is Kia's toll-free Customer Assistance center at 1-855-4KIAVIP (855-454-2847) or 1-800-333-4KIA (800-333-4542).

However, Kia does not endorse nor will it support any changes to any part or structure of the vehicle that could affect the advanced air bag system, including the occupant detection system.

⚠ WARNING

■ Replacement/modifications

The front passenger seat, dashboard or door should not be replaced except by an authorized K900 Kia dealer using original Kia parts designed for this vehicle and model. Any other such replacement or modification could adversely affect the operation of the occupant detection system and your advanced air bags.

Advanced air bags are combined with pre-tensioner seat belts to help provide enhanced occupant protection in frontal crashes. Front air bags are not intended to deploy in collisions in which sufficient protection can be provided by the pre-tensioner seat belt alone.

⚠ WARNING

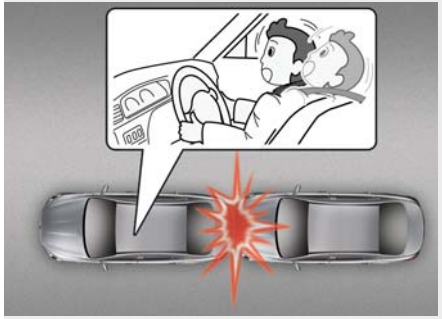
■ SRS Wiring

Do not tamper with or disconnect SRS wiring or other components of the SRS system. Doing so could result in injury, due to accidental deployment of the air bags or by rendering the SRS inoperative.

Front air bags are not intended to deploy in side-impact, rear-impact or rollover crashes. In addition, front air bags will not deploy in frontal crashes below the deployment threshold.

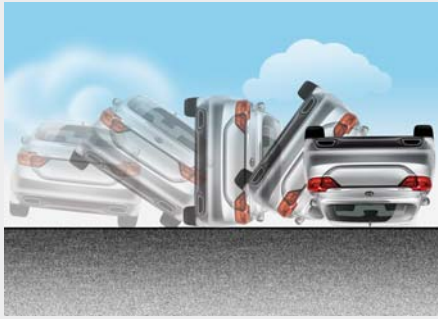
Side air bag

■ Rear impact

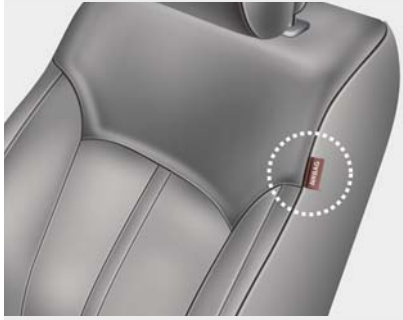


■ Side impact

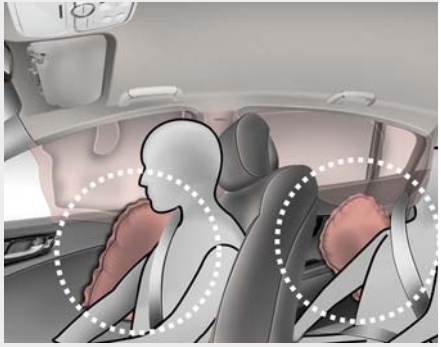
■ Rollover



■ Front



■ Rear



OKH033121N/OKH033056N/OKH033067N/OKH033081N/OKH033120N/OKH033089N

❉ The actual air bags in the vehicle may differ from the illustration.

Your vehicle is equipped with a side air bag in each front and rear outboard seat.

The purpose of the air bag is to provide the vehicle's driver and/or front and rear outboard passenger with additional protection than that offered by the seat belt alone.

The side air bags are designed to deploy only during certain side-impact collisions, depending on the crash severity, angle, speed and point of impact. The side air bags are not designed to deploy in all side impact situations.

The side air bag is supplemental to the driver's and the passenger's seat belt systems and is not a substitute for them. Therefore your seat belts must be worn at all times while the vehicle is in operation.

⚠ WARNING

■ Unexpected deployment

Avoid impact to the side air bag sensor when the ignition switch is ON to prevent unexpected deployment of the side air bag.

For best protection from the side air bag system and to avoid being injured by the deploying side air bag, both front seat occupants should sit in an upright position with the seat belt properly fastened. The driver's hands should be placed on the steering wheel at the 9:00 and 3:00 positions. The passenger's arms and hands should be placed on their laps.

⚠ WARNING

■ Deployment

Do not install any accessories including seat covers, on the side or near the side air bag as this may affect the deployment of the side air bags.

If seat or seat cover is damaged, have the vehicle checked and repaired by an authorized K900 Kia dealer.

Inform that your vehicle is equipped with side air bags and an occupant detection system.

⚠ WARNING

■ Flying objects

Do not place any objects (an umbrella, bag, etc.) between the front door and the front seat. Such objects may become dangerous projectiles if the side air bag inflates.

Curtain air bag

❈ The actual air bags in the vehicle may differ from the illustration.

Curtain air bags are located along both sides of the roof rails above the front and rear doors.

They are designed to help protect the heads of the front seat occupants and the rear outboard seat occupants in certain side impact collisions.

The curtain air bags are designed to deploy only during certain side impact collisions, depending on the crash severity, angle, speed and impact. The curtain air bags are not designed to deploy in all side impact situations, collisions from the front or rear of the vehicle or in most rollover situations.

Do not allow the passengers to lean their heads or bodies onto doors, put their arms on the doors, stretch their arms out of the window, or place objects between the doors and passengers when they are seated on seats equipped with side and/or curtain air bags.

⚠ WARNING

Never try to open or repair any components of the side curtain air bag system. This should only be done by an authorized K900 Kia dealer.

Why didn’t my air bag go off in a collision? (Inflation and non-inflation conditions of the air bag)

There are many types of accidents in which the air bag would not be expected to provide additional protection.

These include rear impacts, second or third collisions in multiple impact accidents, as well as low speed impacts.

Air bag collision sensors

OKH033063N/OKH033064N/OKH033065N/OKH033074N/OKH033066N

(1) SRS control module
(2) Front impact sensor
(3) Side impact sensor (front)
(4) Side impact sensor (rear)

⚠ WARNING

■ Air bag sensors

- **Do not hit or allow any objects to impact the locations where air bag or sensors are installed.**

  This may cause unexpected air bag deployment, which could result in serious personal injury or death.
- **If the installation location or angle of the sensors is altered in any way, the air bags may deploy when they should not or they may not deploy when they should.**

  Therefore, do not try to perform maintenance on or around the air bag sensors. Have the vehicle checked and repaired by an authorized K900 Kia dealer.

Problems may arise if the sensor installation angles are changed due to the deformation of the front bumper, body, front door or C Pillar where the collision sensors are installed. Have the vehicle checked and repaired by an authorized K900 Kia dealer.

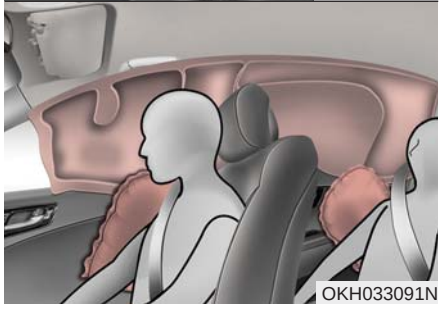
Installing aftermarket bumper guards or replacing a bumper with non-genuine parts may adversely affect your vehicle's collision and air bag deployment performance.

Air bag inflation conditions

Front air bags

Front air bags are designed to inflate in a frontal collision depending on the intensity, speed or angles of impact of the front collision.

OKH033068N


OKH033091N

❈ The actual air bags in the vehicle may differ from the illustration.

Side air bags

Side air bags (side and/or curtain air bags) are designed to inflate when an impact is detected by side collision sensors depending on the strength, speed or angles of impact resulting from a side impact collision.

Although the front air bags (driver's and front passenger's air bags) are designed to inflate in frontal collisions, they also may inflate in other types of collisions if the front impact sensors detect a sufficient frontal force in another type of impact. Side impact and curtain air bags are designed to inflate in certain side impact collisions. They may inflate in other type of collisions where a side force is detected by the sensors.

If the vehicle chassis is impacted by bumps or objects on unimproved roads or sidewalks, air bags may deploy. Drive carefully on unimproved roads or on surfaces not designed for vehicle traffic to prevent unintended air bag deployment.

Air bag non-inflation conditions

OKH033084N

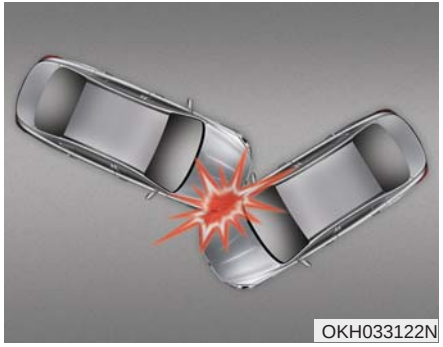
- In certain low-speed collisions the air bags may not deploy. The air bags are designed not to deploy in such cases because they may not provide benefits beyond the protection of the seat belts in such collisions.

OKH033085N

- Air bags are not designed to inflate in rear collisions, because occupants are moved backward by the force of the impact. In this case, inflated air bags would not be able to provide any additional benefit.

OKH033068N

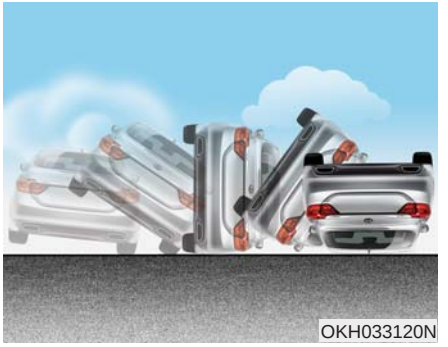
- Front air bags may not inflate in side impact collisions, because occupants move to the direction of the collision, and thus in side impacts, front air bag deployment would not provide additional occupant protection.


OKH033122N

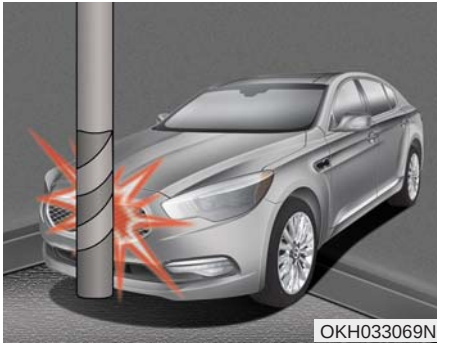
- In a slant or angled collision, the force of impact may direct the occupants in a direction where the air bags would not be able to provide any additional benefit, and thus the sensors may not deploy any air bags.

OKH033086N

- Just before impact, drivers often brake heavily. Such heavy braking lowers the front portion of the vehicle causing it to “ride” under a vehicle with a higher ground clearance. Air bags may not inflate in this "under-ride" situation because deceleration forces that are detected by sensors may be significantly replaced by such “under-ride” collisions.


OKH033120N

- Air bags do not inflate in all rollover accidents, even though the vehicle is equipped with side air bags and curtain air bags.


OKH033069N

- Air bags may not inflate if the vehicle collides with objects such as utility poles or trees, where the point of impact is concentrated to one area and the full force of the impact is not delivered to the sensors.

SRS Care

The SRS is virtually maintenance-free and there are no parts you can safely service by yourself. If the SRS air bag warning light does not illuminate, or continuously remains on, have your vehicle immediately inspected by an authorized K900 Kia dealer.

Any work on the SRS system, such as removing, installing, repairing, or any work on the steering wheel must be performed by an authorized K900 Kia dealer. Improper handling of the SRS system may result in serious personal injury.

For cleaning the air bag pad covers, use only a soft, dry cloth or one which has been moistened with plain water. Solvents or cleaners could adversely affect the air bag covers and proper deployment of the system.

⚠ WARNING

■ Tampering with SRS

Do not tamper with or disconnect SRS wiring, or other components of the SRS system. Doing so could result in the accidental inflation of the air bags or by rendering the SRS inoperative.

If components of the air bag system must be discarded, or if the vehicle must be scrapped, certain safety precautions must be observed. An authorized K900 Kia dealer knows these precautions and can give you the necessary information. Failure to follow these precautions and procedures could increase the risk of personal injury.

Adding equipment to or modifying your air bag-equipped vehicle

If you modify your vehicle by changing your vehicle's frame, bumper system, front end or side sheet metal or ride height, this may affect the operation of your vehicle's air bag system.

Air bag warning label

OKH033071N

OKH033072N

OKH033073N

Air bag warning labels, some required by the U.S. National Highway Traffic Safety Administration (NHTSA), are attached to alert the driver and passengers of potential risks of the air bag system.

Features of your vehicle

Smart key....4-4
- Record your key number....4-4
- Smart key functions....4-4
- Smart key precautions....4-6
- Remote keyless entry system operations....4-7
- Transmitter precautions....4-8
- Battery replacement....4-9
- Mechanical key operations....4-10
- Restrictions in handling keys....4-11
- Immobilizer system....4-12

Theft-alarm system....4-14
- Armed stage....4-14
- Theft-alarm stage....4-15
- Disarmed stage....4-15

Door locks....4-17
- Operating door locks from outside the vehicle....4-17
- Power door latch....4-18
- Operating door locks from inside the vehicle....4-18
- Impact sensing door unlock system....4-20
- Auto door lock/unlock feature....4-20
- Child-protector rear door lock....4-20

Trunk....4-21
- Non-powered trunk....4-21
- Power trunk....4-22
- Trunk lid control button....4-25
- Emergency trunk safety release....4-26

Windows....4-28
- Power windows....4-29
- Power window lock button....4-31

Hood....4-32
- Opening the hood....4-32
- Closing the hood....4-33

Fuel filler lid....4-34
- Opening the fuel filler lid....4-34
- Closing the fuel filler lid....4-34
- Emergency fuel filler lid release....4-36

Panoramic sunroof....4-37
- Sunroof open warning....4-37
- Sliding the sunroof....4-38
- Closing the sunroof....4-38
- Tilting the sunroof....4-39
- Sunshade....4-40
- Resetting the sunroof....4-41

Steering wheel....4-42
- Electronic Hydraulic Power Steering (EHPS)....4-42
- Tilt steering/telescope steering....4-42
- Heated steering wheel....4-43
- Horn....4-44

Mirrors....4-45
- Inside rearview mirror....4-45
- Outside rearview mirror....4-53

Instrument cluster 4-57
• Instrument cluster control....4-58
• LCD display control....4-58
• Gauges....4-59
• Transaxle shift indicator....4-62
LCD display....4-63
• LCD modes....4-63
• Trip computer mode....4-64
• Turn by turn (TBT) mode....4-64
• ASCC/LDWS mode....4-64
• A/V mode....4-65
• Information mode....4-65
• User settings mode....4-67
• Warning messages....4-73
Trip computer....4-80
• Overview....4-80
• Fuel economy....4-80
• Trip A/B....4-82
Warning and indicator lights....4-84
• Warning lights....4-84
• Indicator lights....4-93
Head up display (HUD)....4-99
• Description....4-99
• Head Up Display ON/OFF....4-100
• Head Up Display Information....4-100
• Head Up Display Setting....4-101
Parking Assist System....4-102
• Operation of the Parking Assist System....4-102
• Non-operational conditions of Parking Assist System....4-104
• Self-diagnosis....4-106
Rear Camera Display....4-107
Parking Guide System....4-108
• Parking Guide System (PGS) display....4-108
• Changing rear view angle....4-109
Front Blind Spot Monitoring System....4-110
Surround View Monitoring System (SVM)....4-111
Welcome system....4-112
• Puddle lamp....4-112
• Headlight....4-112
• Interior light....4-112
Lighting....4-113
• Battery saver function....4-113
• Headlight escort function....4-113
• Daytime running light....4-114
• Lighting control....4-114
• High beam operation....4-117
• Turn signals and lane change signals....4-118
• Front fog light....4-119
• Headlight leveling device....4-119
Wipers and washers....4-120
• Windshield wiper/washer....4-120

Interior light 4-123
• Automatic turn off function 4-123
• Front lamp switch 4-123
• Rear lamp switch 4-124
• Trunk room lamp 4-125
• Door courtesy lamp 4-125
• Glove box lamp 4-126
• Vanity mirror lamp 4-126
Defroster 4-127
• Rear window defroster 4-127
Automatic climate control system 4-128
• Automatic heating and air conditioning 4-129
• Manual heating and air conditioning 4-130
• System operation 4-138
• Climate control air filter 4-140
• Checking the amount of air conditioner refrigerant and compressor lubricant 4-140
• Air conditioning refrigerant label 4-141
Windshield defrosting and defogging 4-142
• To defog inside windshield 4-142
• To defrost outside windshield 4-143
• Defogging logic 4-143
• Auto Defogging System 4-144
Storage compartments 4-146
• Center console storage 4-146
• Rear seat storage 4-146
• Glove box 4-147
• Sunglass holder 4-147
• Seatback pocket 4-148
• Map pocket 4-149
Interior features 4-150
• Cup holder 4-150
• Sunvisor 4-150
• Power outlet 4-151
• Seat warmer 4-152
• Air ventilation seat 4-154
• Clock 4-156
• Clothes hanger 4-157
• Floor mat anchor(s) 4-157
• Rear vanity mirror 4-158
• Bag hanger 4-158
• Luggage net (holder) 4-159
• Rear curtain 4-159
• Side curtain 4-160
Multimedia system 4-161
• Aux, USB and iPod® port 4-161
• USB charger 4-161
• Audio / Video / Navigation system (AVN) 4-162
• Driver Information System (DIS) 4-162
• Bluetooth® Wireless Technology hands-free 4-163
• Antenna 4-163
• Steering wheel audio control 4-164

SMART KEY

Record your key number

The key code number is stamped on the key code tag attached to the key set. Should you lose your keys, this number will enable an authorized K900 Kia dealer to duplicate the keys easily. Remove the key code tag and store it in a safe place. Also, record the key code number and keep it in a safe and handy place, but not in the vehicle.

⚠ WARNING

■ Smart key

Leaving children unattended in a vehicle with the smart key is dangerous. Children copy adults and they could press the ENGINE START/STOP button. It would enable children to operate power windows or other controls, or even make the vehicle move, which could result in serious bodily injury or even death. Never leave the keys in your vehicle with unsupervised children when the engine is running.

Smart key functions

■ Conventional smart key

OKH043004N

■ Card type smart key (if equipped)

OKH043002N

1. Door lock
2. Door unlock
3. Trunk open
4. Panic alarm

With smart key, you can lock or unlock doors (and trunk) and start the engine without inserting the key. Refer to the following, for more details.

Locking

OKH043003N

Pressing the button of the front outside door handles with all doors closed and any door unlocked, locks all the doors. The hazard warning lights will blink and the chime will sound once to indicate that all doors are locked. The button will only operate when the smart key is within 0.7~1 m (28~40 in.) from the outside door handle. If you want to make sure that a door has locked or not, you should check the door lock button inside the vehicle or pull the outside door handle.

In some instances, when the outside door button is selected, the doors will not lock and an audible chime will sound for 3 seconds if any of the following occurs:

- The smart key is in the vehicle.
- The ignition switch is in the ACC or ON position.
- Any door except the trunk is opened.

Unlocking

Pressing the button of the driver's (or front passenger's) outside door handle with all doors closed and locked, unlocks the driver's door.

If you press the button of the driver's outside door handle again within 4 seconds, The other doors will be unlocked. But if you press the button of the driver's outside door handle again after 4 seconds, all doors will be locked. The hazard warning lights will blink and the chime will sound twice to indicate that the driver's door is unlocked. Also, the outside rearview mirrors will automatically unfold if the outside rearview mirror folding switch is in the AUTO position.

The button will only operate when the smart key is within 28~40 in. (0.7~1 m) from the outside door handle.

Start-up

You can start the engine without inserting the key. For detailed information refer to "Starting the engine with a smart key" in chapter 5.

Smart key precautions

- If you lose your smart key, you will not be able to start the engine. Tow the vehicle, if necessary, and contact an authorized K900 Kia dealer.
- A maximum of 2 smart keys can be registered to a single vehicle. If you lose a smart key, you should immediately take the vehicle and key to your authorized K900 Kia dealer to protect it from potential theft.
- The smart key will not work if any of following occurs:
  - The smart key is close to a radio transmitter such as a radio station or an airport which can interfere with normal operation of the smart key.
  - The smart key near a mobile two-way radio system or a cellular phone.
  - Another vehicle's smart key is being operated close to your vehicle.

  When the smart key does not work correctly, open and close the door with the mechanical key. If you have a problem with the smart key, contact an authorized K900 Kia dealer.
- If the smart key is in close proximity to your cell phone or smart phone, the signal from the smart key could be blocked by normal operation of your cell phone or smart phone. This is especially important when the phone is active such as making call, receiving calls, text messaging, and/or sending/receiving emails. Avoid placing the smart key and your cell phone or smart phone in the same pants or jacket pocket and maintain adequate distance between the two devices.

⚠ CAUTION

■ Transmitter

Keep the smart key away from water or any liquid as it can become damaged and not function properly.

Remote keyless entry system operations

OKH043004N

Lock (1)

All doors are locked if the lock button is pressed. If all doors (and trunk) are closed, the hazard warning lights will blink once to indicate that all doors (and trunk) are locked.

Also, if the lock button is pressed once more within 4 seconds, the hazard warning lights will blink and the chime will sound once to confirm that the door is locked.

However, if any door remains open, the hazard warning lights (and/or the chime) will not operate. But if all doors are closed after the lock button is pressed, the hazard warning lights will blink once.

Unlock (2)

The driver's door is unlocked if the unlock button is pressed once. The hazard warning lights will blink (for smart key, the chime also sounds) twice to indicate that the driver's door is unlocked.

All doors are unlocked if the unlock button is pressed once more within 4 seconds. The hazard warning lights will blink (for smart key, the chime also sounds) twice again to indicate that all doors are unlocked. After pressing this button, the doors will lock automatically unless you open any door within 30 seconds.

✻ NOTICE

If the keyless entry system is inoperative due to exposure to water or liquids, it will not be covered by your manufacturer's vehicle warranty.

Trunk open (3)

The trunk is opened if the button is pressed for more than 1 second.

Once the trunk is opened and then closed, the trunk will lock automatically.

Panic alarm (4)

The horn sounds and the hazard warning lights blink for about 30 seconds if this button is pressed for more than 0.5 seconds. To stop the horn and lights, press any button on the transmitter.

Transmitter precautions

The transmitter (or smart key) will not work if any of following occurs:

- You exceed the operating distance limit (about 90 feet [30 m]).
- The battery in the transmitter (or smart key) is weak.
- Other vehicles or objects may be blocking the signal.
- The weather is extremely cold.
- The transmitter (or smart key) is close to a radio transmitter such as a radio station or an airport which can interfere with normal operation of the transmitter.

When the transmitter (or smart key) does not work properly, open and close the door with the ignition key. If you have a problem with the transmitter (or smart key), contact an authorized K900 Kia dealer.

- If the transmitter is in close proximity to your cell phone or smart phone, the signal from the transmitter could be blocked by normal operation of your cell phone or smart phone. This is especially important when the phone is active such as making call, receiving calls, text messaging, and/or sending/receiving emails. Avoid placing the transmitter and your cell phone or smart phone in the same pants or jacket pocket and maintain adequate distance between the two devices.

Pursuant to Code of Federal Regulations, Title 47, Part 15 ("FCC Rules")

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

✻ NOTICE

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. If the keyless entry system is inoperative due to changes or modifications not expressly approved by the party responsible for compliance, it will not be covered by your manufacturer's vehicle warranty.

Battery replacement

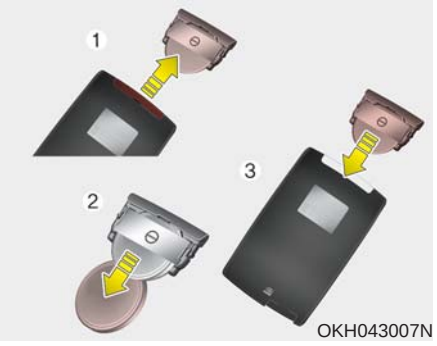
Conventional smart key

A battery should last for several years, but if the smart key is not working properly, try replacing the battery with a new one. If you are unsure how to use or replace the battery, contact an authorized K900 Kia dealer.

OKH043006N

1. Pry open the smart key center cover.
2. Replace the battery with a new battery (CR2032). When replacing the battery, make sure the battery position.
3. Install the battery in the reverse order of removal.

Card type smart key (if equipped)



1. Pull out the battery and battery cover.
2. Remove the old battery and insert the new battery (CR2412). Make sure the battery position is correct.
3. Reinstall the battery cover and battery.

The smart key is designed to give you years of trouble-free use, however it can malfunction if exposed to moisture or static electricity. If you are unsure how to use or replace the battery, contact an authorized K900 Kia dealer.

Using the wrong battery can cause the transmitter or smart key to malfunction. Be sure to use the correct battery.

An inappropriately disposed battery can be harmful to the environment and human health.

Dispose the battery according to your local law(s) or regulation.

⚠ CAUTION

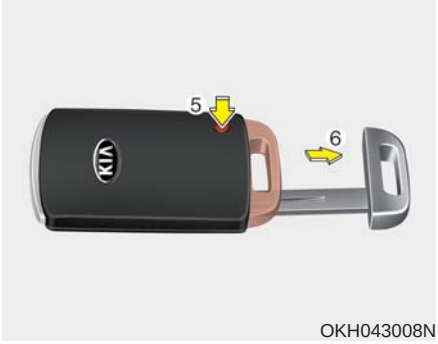
■ Transmitter damage

Do not drop, wet or expose the keyless entry system transmitter to heat or sunlight.

Mechanical key operations

- Used to lock and unlock the glove box.
- Lock and unlock the doors when the vehicle or smart key battery is discharged.

Conventional smart key



OKH043008N

To remove the mechanical key, press and hold the release button(1) and remove the mechanical key(2).

To reinstall the mechanical key, put the key into the hole and push it until a click sound is heard.

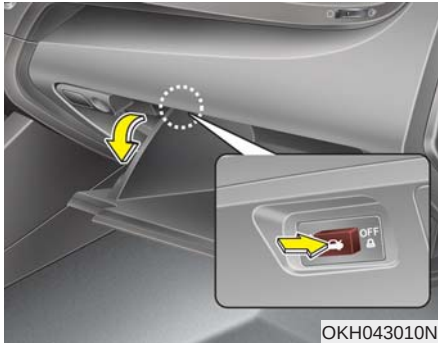
Card type smart key (if equipped)

OKH043009N

Push and hold the release lever (1) and remove the mechanical key (2). Insert the mechanical key in to the key hole on the door.

To reinstall the mechanical key, push and hold the release lever (1) and put the key into the hole and push it until a click sound is heard.

Restrictions in Handling Keys



OKH043010N

When leaving keys with parking lot and valet attendants, the following procedures will ensure your vehicle's trunk and glove box compartment can only be opened with the mechanical key.

To lock:

1. Remove the mechanical key from the Smart Key.
2. Unlock the glove box by using the mechanical key, then open it.
3. Set the Trunk Lid Control button to the OFF position (not depressed).
4. Close and lock the glove box using the mechanical key.
5. Leave the Smart Key with the attendant and keep the mechanical key with you.

The Smart Key can only be used to start the engine and operate door locks.

To release:

1. Open the glove box with the mechanical key.
2. Set the Trunk Lid Control button to the ON position (depressed).

In this position the trunk lid will open with the Trunk Lid button or the Smart Key.

Immobilizer system

Your vehicle is equipped with an electronic engine immobilizer system to reduce the risk of unauthorized vehicle use.

Whenever the ENGINE START/STOP button is changed to the ON position, the immobilizer system checks and verifies if the key is valid or not.

If the key is valid, the engine will start.

If the key is invalid, the engine will not start.

To deactivate the immobilizer system

Change the ENGINE START/STOP button to the ON position.

To activate the immobilizer system

Change the ENGINE START/STOP button to the OFF position. The immobilizer system activates automatically. Without a valid smart key for your vehicle, the engine will not start.

Your immobilizer password is a customer unique password and should be kept confidential. Do not leave this number anywhere in your vehicle.

✻ NOTICE

Keep each key separate in order to avoid a starting malfunction.

Do not put metal accessories near the ignition switch.

Metal accessories may interrupt the transponder signal and may prevent the engine from being started.

If you need additional keys or lose your keys, consult an authorized K900 Kia dealer.

⚠ CAUTION

■ Immobilizer damage

Do not expose your immobilizer system to moisture, static electricity and rough handling. This may damage your immobilizer.

⚠ CAUTION

■ Immobilizer alterations

Do not change, alter or adjust the immobilizer system because it could cause the immobilizer system to malfunction.

Pursuant to Code of Federal Regulations, Title 47, Part 15 ("FCC Rules")

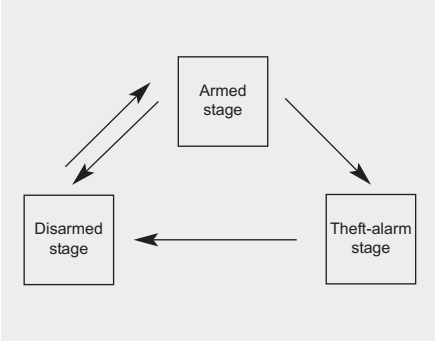
Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

⚠ CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

THEFT-ALARM SYSTEM



This system is designed to provide protection from unauthorized entry into the vehicle. This system is operated in three stages: the first is the "Armed" stage, the second is the "Theft-alarm" stage, and the third is the "Disarmed" stage. If triggered, the system provides an audible alarm with blinking of the hazard warning lights.

Armed stage

Park the vehicle and stop the engine.

Arm the system as described below.

1. Turn off the engine.
2. Make sure that all doors (and trunk) and engine hood are closed and latched.
3. • Lock the doors by depressing the door lock button on the transmitter (or smart key).

   After completion of the steps above, the hazard warning lights will blink once to indicate that the system is armed.

   If any door, trunk or engine hood remains open, the hazard warning lights won't operate and theft-alarm will not arm. After this, if all doors, trunk and engine hood are closed, the hazard warning lights blink once.

   • Lock the doors by pressing the button of the front outside door handles with the smart key in your possession.

   After completion of the steps above, the hazard warning lights will blink once to indicate that the system is armed.

   If any door remains open, the hazard warning lights won't operate and theft-alarm will not arm. Close the door and try again to lock the doors.

   If trunk or engine hood remains open, the hazard warning lights won't operate and theft-alarm will not arm. Close the trunk or engine hood. The hazard warning lights blink once and theft-alarm arms.

The theft-alarm system by the key can be activated by an authorized Kia dealer.

If you want this feature, consult an authorized K900 Kia dealer.

Do not arm the system until all passengers have left the vehicle. If the system is armed while a passenger(s) remains in the vehicle, the alarm may be activated when the remaining passenger(s) leaves the vehicle. If any door (or trunk) or engine hood is opened within 30 seconds after the system enters the armed stage, the system will be disarmed to prevent unnecessary alarm.

Theft-alarm stage

The alarm will be activated if any of the following occurs while the system is armed.

- A front or rear door is opened without using the smart key (or mechanical key).
- The trunk is opened without using the smart key (or mechanical key).
- The engine hood is opened.

The horn will sound and the hazard warning lights will blink continuously for approximately 27 seconds. To turn off the system, unlock the doors with the smart key.

Disarmed stage

The system will be disarmed when:

- The door unlock button is pressed.
- The button of the front outside door is pressed while carrying the smart key.
- The engine is started. (within 3 seconds)

After the doors are unlocked, the hazard warning lights will blink twice to indicate that the system is disarmed.

After pressing the unlock button, if any door (or trunk) is not opened within 30 seconds, the system will be rearmed.

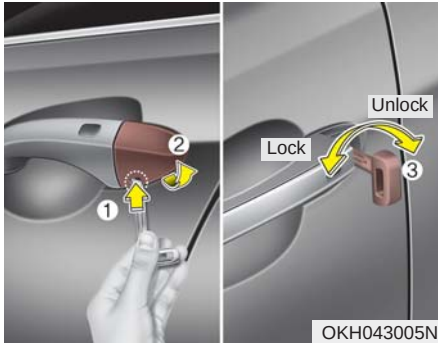
- Avoid trying to start the engine while the alarm is activated. The vehicle starting motor is disabled during the theft-alarm stage.

  If the system is not disarmed with the smart key, open the doors by using the mechanical key and start the engine by directly pressing the engine Start/Stop button with the smart key.
- If you lose your keys, consult your authorized K900 Kia dealer.

DOOR LOCKS

Operating door locks from outside the vehicle

Mechanical key



- After removing the cover (1) ~ (2), turn the key toward the rear of the vehicle to unlock and toward the front of the vehicle to lock (3), (4).
- If you lock/unlock the driver's door with a key, only the driver's door will lock/unlock.
- Once the doors are unlocked, they may be opened by pulling the door handle.
- When closing the door, push the door by hand. Make sure that doors are closed securely.

Smart key

- Doors can be locked and unlocked with the transmitter (or smart key).
- Doors can be locked and unlocked by pressing the button of the outside door handle with the smart key in your possession.
- Once the doors are unlocked, they may be opened by pulling the door handle.
- When closing the door, push the door by hand. Make sure that doors are closed securely.

✻ NOTICE

- **In cold and wet climates, door lock and door mechanisms may not work properly due to freezing conditions.**
- **If the door is locked/unlocked multiple times in rapid succession with either the vehicle key or door lock switch, the system may stop operating temporarily in order to protect the circuit and prevent damage to system components.**

Power Door Latch (if equipped)

OKH043011N

If a door isn't closed completely but is closed to the first detent position, the door will close automatically.

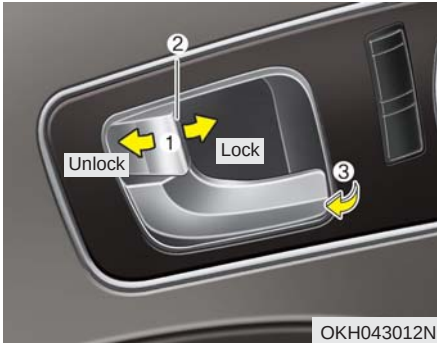
⚠ CAUTION

■ **To reduce the risk of injury:**

- **Before closing the door, check there are no obstructions in the path of the door.**
- **Keep your fingers away from the edge of the door or they may become trapped when the power door latch operates.**

Operating door locks from inside the vehicle

With the door lock button



OKH043012N

- To unlock a door, push the door lock button (1) to the "Unlock" position. The red mark (2) on the button will be visible.
- To lock a door, push the door lock button (1) to the "Lock" position. If the door is locked properly, the red mark (2) on the door lock button will not show.
- To open a door, pull the door handle (3) outward.
- If the inner door handle of the front door is pulled when the door lock button is in the lock position, the button will unlock and the door will open.
- Front doors cannot be locked if the smart key is in the vehicle and any front door is opened.

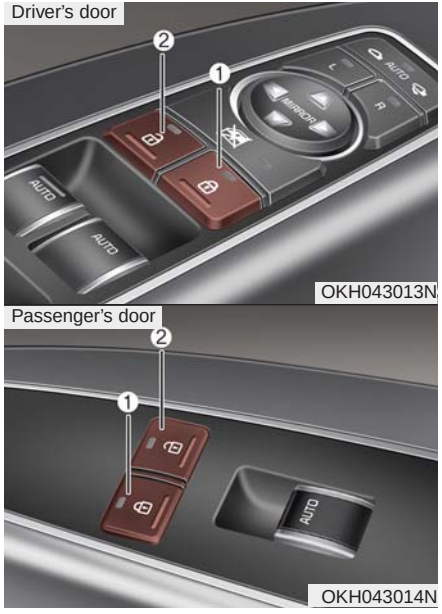
If a power door lock ever fails to function while you are in the vehicle, try one or more of the following techniques to exit:

- Operate the door unlock feature repeatedly (both electronic and manual) while simultaneously pulling on the door handle.
- Operate the other door locks and handles, front and rear.
- Lower a front window and use the key to unlock the door from outside.

Rear door lock button

- To lock a rear door, press the door lock button (1). The indicator on the button will illuminate.
- To unlock a rear door, press the door unlock button (2). The indicator on the button will illuminate.
- The rear door lock operates only on the rear doors with a rear door lock button.

With central door lock switch



Locking

- When pressing the door lock button (1), all vehicle doors will lock and the indicator on the button will illuminate. If any door is unlocked, the indicator will turn off.
- If the smart key is in the vehicle and any door is opened, doors will not lock.

Unlocking

When pressing the door unlock button (2), all vehicle doors will unlock and the indicator on the button will illuminate.

If any door is locked, the indicator will turn off.

⚠ WARNING

■ Doors

The doors should always be fully closed and locked while the vehicle is in motion to prevent accidental opening of the door.

⚠ WARNING

■ Unattended children/animals

Never leave children or animals unattended in your vehicle.

An enclosed vehicle can become extremely hot, causing death or severe injury to unattended children or animals who cannot escape the vehicle.

Impact sensing door unlock system

All doors will automatically unlock when an impact causes the air bags to deploy.

Auto door lock/unlock feature

You can activate or deactivate the auto door lock/unlock features in the vehicle. Refer to "LCD display" in this chapter.

Child-protector rear door lock

The child safety lock is provided to help prevent children seated in the rear from accidentally opening the rear doors. The rear door safety locks should be used whenever children are in the vehicle.

The child safety lock (1) is located on the edge of each rear door. When the child safety lock is in the lock position (🔒), that rear door will not open if the inner door handle is pulled (2).

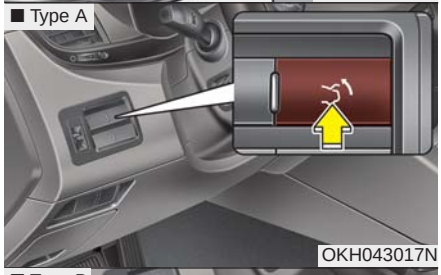
To allow a rear door to be opened from inside the vehicle, unlock (🔓) the child safety lock.

TRUNK

Non-Powered Trunk

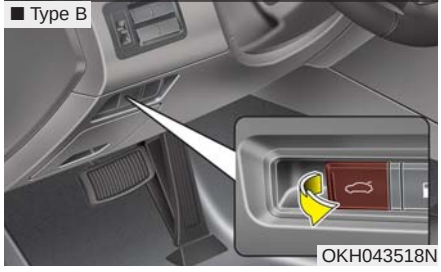
OKH043016N

■ Type A



OKH043017N

■ Type B



OKH043518N

To open:

1. Make sure the shift lever is in P (Park).
2. Then do one of the following :
   - Press the smart key trunk unlock button for more than one second.
   - Press the button on the trunk itself with the smart key in your possession.
   - Use the mechanical key.
   - Use the trunk release button (or lever).
3. Lift the trunk lid up.

To close:

Lower the trunk lid and press down until it locks.

⚠ WARNING

Always keep the trunk lid completely closed while the vehicle is in motion. If it is left open or ajar, poisonous exhaust gases containing carbon monoxide (CO) may enter the vehicle and serious illness or death may result.

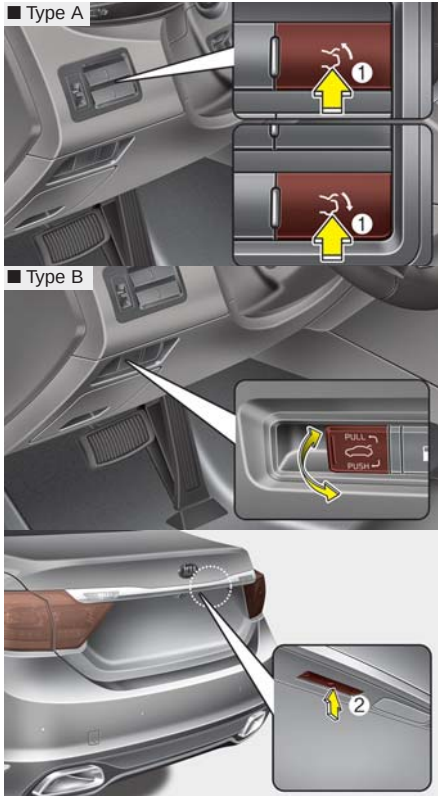
⚠ WARNING

The trunk swings upward. Make sure no objects or people are near the rear of the vehicle when opening the trunk.

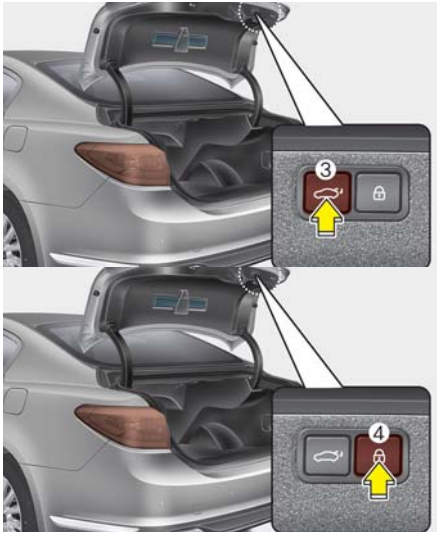
✻ NOTICE

In cold and wet climates, trunk lock and trunk mechanisms may not work properly due to freezing conditions.

Power Trunk



OKH043257N/OKH043259N/OKH043018N



OKH043019N/OKH043020N

(1) Power Trunk Main Control button (or lever)
(2) Power Trunk Open button
(3) Power Trunk Close button
(4) Power Trunk Lock button

To open:

1. Make sure the shift lever is in P (Park).
2. Then do one of the following:
   - Press the smart key trunk unlock button for more than one second.
   - Press the open button on the trunk. You need the smart Key in your possession, when all doors are locked.
   - Press the power trunk main control button (for type A).
   - Pull the power trunk, main control lever (for type B).

To close:

Do one of the following:

- Press the power trunk main control button until the power trunk is closed securely (for type A).
- Push the power trunk main control lever until the power trunk is closed securely (for type B).
- Press the close button on the trunk.
- Press the lock button on the trunk while carrying the smart key and all the vehicle's doors and trunk are closed. All doors and trunk will lock and arm the theft alarm system.

If you push a button or lever while the trunk is opening or closing, it could stop moving. Press any button to operate the power trunk again.

✻ NOTICE

The power trunk lock button will not work if you press the button when:

- **Any door is open.**
- **The engine start/stop button is not in the OFF position.**
- **The smart key is in the vehicle.**

⚠ WARNING

Never leave children or animals unattended in your vehicle. Children or animals might operate the power trunk that could result in injury to themselves or others, or damage to the vehicle.

⚠ WARNING

Always keep the trunk lid completely closed while the vehicle is in motion. If it is left open or ajar, poisonous exhaust gases containing carbon monoxide (CO) may enter the vehicle and serious illness or death may result.

⚠ WARNING

Make sure there are no people or objects around the trunk before opening or closing the power trunk. Wait until the trunk is open fully and stopped before loading or unloading cargo from the vehicle.

⚠ CAUTION

- **Do not close or open the power trunk manually. This may cause damage to the power trunk. If it is necessary to close or open the power trunk manually when the battery is drained or disconnected, do not apply excessive force.**
- **Do not leave the power trunk open for a long period of time. This may drain the battery.**
- **To prevent damage to the trunk lift cylinders and the attached hardware, always close the trunk before driving.**

✻ NOTICE

In cold and wet climates, trunk lock and trunk mechanisms may not work properly due to freezing conditions.

Power Trunk Non-Opening or Closing Conditions:

- The power trunk will not open or close automatically, when the vehicle is moving more than 1.8 mph (3 km/h).
- The power trunk can be operated when the engine is not running. However, the power trunk operation consumes large amounts of vehicle electric power. To prevent the battery from draining, do not operate it excessively (e.g., more than approximately 10 times repeatedly).
- Do not modify or repair any part of the power trunk by yourself. This must be done by an authorized K900 Kia dealer.
- Before jacking up the vehicle to change a tire or repair the vehicle, open the power trunk. Do not operate the power trunk when the vehicle is raised or this could cause the power trunk to operate improperly.
- If there are obstacles such as snow on the power trunk, it may not open automatically. After removing the obstacle, try to open it again.

Automatic stop and Reverse

OKH043021N

If, during power opening or closing, the trunk is blocked by an object or part of someone's body, the power trunk will detect the resistance and it will stop movement or move to the full open position to allow the object to be cleared.

However, if an object is thin or soft, or the trunk is near the latched position, the automatic stop and reversal may not detect the resistance and the closing operation will continue. If the power trunk is forced by a strong impact, the automatic stop and reversal may operate.

If the automatic stop and reverse feature operates more than twice during one opening or closing operation, the power trunk may stop at that position. If this occurs, close the trunk manually and operate the trunk automatically again.

⚠ WARNING

To prevent serious injury and damage take the following precautions when operating the power trunk:

- **Keep all faces, hands, arms, body parts and other objects away from the path of the power trunk.**
- **Do not intentionally place any body parts or objects in the path of the power trunk to make sure the automatic stop and reversal operates.**
- **Do not allow children to play with the power trunk.**

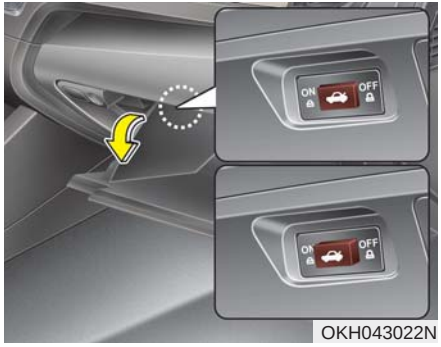
To Reset the Power Trunk

If the battery has been discharged or disconnected, or if the related fuse has been replaced or disconnected, reset the power trunk as follows:

1. Move the shift lever to the P(Park) position.
2. Close the trunk manually.

If the power trunk doesn't work properly after performing the above procedure, have the system checked by an authorized K900 Kia dealer.

Trunk Lid Control Button



OKH043022N

When the trunk lid control button is ON (depressed), the power trunk can be controlled with the power trunk main control button, power trunk open, close button, and the smart key.

When this trunk lid control button is OFF (not depressed), the power trunk can be controlled using the mechanical key of the smart key only.

Even though the trunk lid control button is OFF (not depressed), the trunk will still be propelled upward by mechanical force if the trunk is manually opened more than 10 degrees beyond the fully closed position.

In addition, if the trunk is manually closed to the secondary latch position, the trunk will be electrically moved to the fully latched position.

⚠ WARNING

- **Always keep the Trunk Lid Control Button in the OFF (not depressed) position when not in use. Serious injury or death can result from unintentional operation by a child.**
- **Make sure heads, other body parts or other obstacles are safely out of the way before operating the power trunk.**

⚠ CAUTION

Close the trunk, and keep the trunk lid control button in the OFF (not depressed) position before washing the vehicle in an automatic car wash.

✻ NOTICE

If the trunk does not unlock using the smart key or the trunk lid release button, ensure the trunk lock system is not activated.
To release the trunk lock feature, open the glove box with feature, open the glove box with the mechanical key and set the trunk lid control button to the ON position (pressed). In this position the trunk will open with the trunk lid button or smart key.

Emergency Trunk Safety Release

Your vehicle is equipped with an Emergency Trunk Safety Release lever located inside the trunk. When someone is inadvertently locked in the trunk, the trunk can be opened by moving the lever in the direction of the arrow and pushing the trunk open.

⚠ WARNING

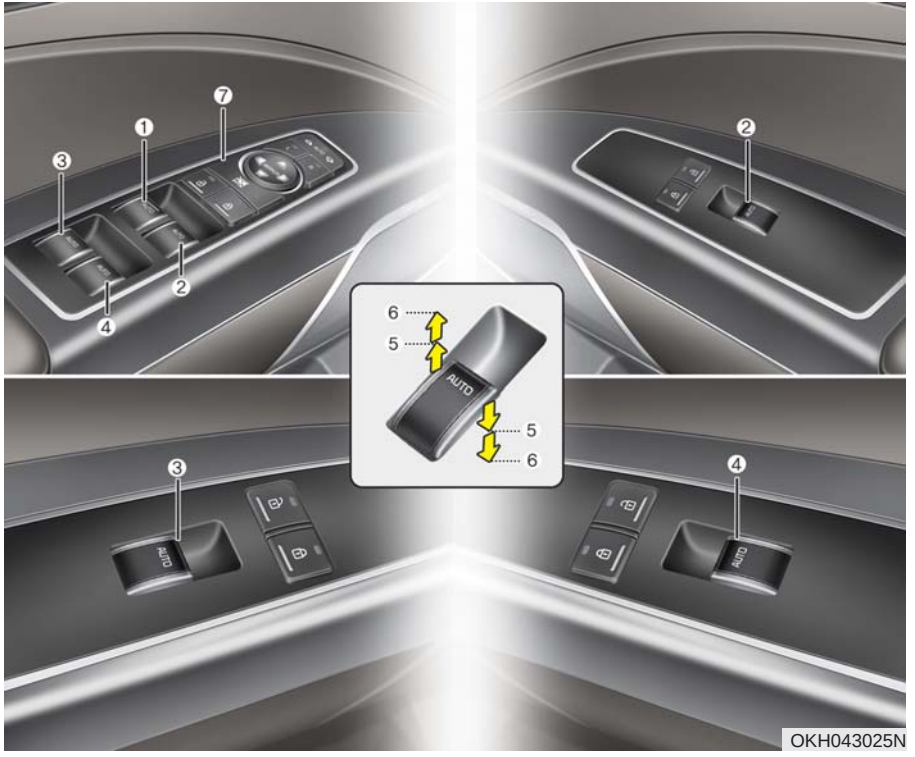
- **You and your passengers must be aware of the location of the Emergency Trunk Safety Release lever in this vehicle and how to open the trunk in case you are accidentally locked in the trunk.**
- **NEVER allow anyone to occupy the trunk of the vehicle at any time. If the trunk is partially or totally latched and the person is unable to get out, serious injury or death could occur due to lack of ventilation, exhaust fumes and rapid heat build-up, or because of exposure to cold weather conditions. The trunk is also a highly dangerous location in the event of a crash because it is not a protected occupant space but is a part of the vehicle's crush zone.**

(Continued)

(Continued)

- **Your vehicle should be kept locked and the Smart Key should be kept out of the reach of children. Parents should teach their children about the dangers of playing in trunks.**
- **Use the release lever for emergencies only.**

WINDOWS



(1) Driver's door power window switch
(2) Front passenger's door power window switch
(3) Rear door (left) power window switch
(4) Rear door (right) power window switch
(5) Window opening and closing
(6) Automatic power window up/down
(7) Power window lock button

In cold and wet climates, power windows may not work properly due to freezing conditions.

Power windows

The ignition switch must be in the ON position for power windows to operate. Each door has a power window switch that controls the door's window. The driver has a power window lock switch which can block the operation of rear passenger windows.

The power windows can be operated for approximately 30 seconds after the ignition key is removed or turned to the ACC or LOCK position. However, if the front doors are opened, the power windows cannot be operated even within the 30 second period.

✻ NOTICE

While driving with the rear windows down or with the sunroof (if equipped) in an open (or partially open) position, your vehicle may demonstrate a wind buffeting or pulsation noise. This noise is a normal occurrence and can be reduced or eliminated by taking the following actions. If the noise occurs with one or both of the rear windows down, partially lower both front windows approximately one inch. If you experience the noise with the sunroof open, slightly reduce the size of the sunroof opening.

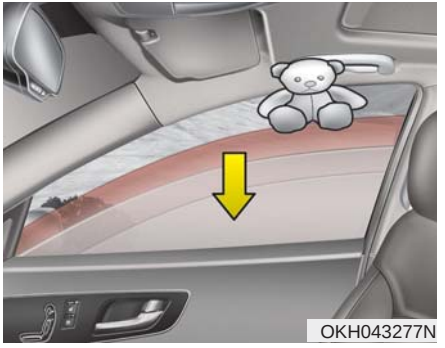
Window opening and closing

OKH043026N

Pressing or pulling up the power window switch momentarily to the second detent position (6) completely lowers or lifts the window even when the switch is released. To stop the window at the desired position while the window is in operation, pull up or press and release the switch to the opposite direction of the movement.

If the power window is not operated correctly, the automatic power window system must be reset as follows:

1.Press the Engine Start/Stop Button twice to the ON position.
2.Close the window and continue pulling up on the driver's power window switch for at least 1 second after the window is completely closed.


OKH043277N

Automatic reversal

If the upward movement of the window is blocked by an object or part of the body, the window will detect the resistance and will stop upward movement. The window will then lower approximately 11.8 in. (30 cm) to allow the object to be cleared.

If the window detects the resistance while the power window switch is pulled up continuously, the window will stop upward movement then lower approximately 1 in. (2.5 cm).

And if the power window switch is pulled up continuously again within 5 seconds after the window is lowered by the automatic window reversal feature, the automatic window reversal will not operate.

The automatic reverse feature for the driver's window is only active when the "auto up" feature is used by fully pulling up the switch. The automatic reverse feature will not operate if the window is raised using the halfway position on the power window switch.

⚠ WARNING

Always check for obstructions before raising any window to avoid injuries or vehicle damage. If an object less than 0.16 in. (4 mm) in diameter is caught between the window glass and the upper window channel, the automatic reverse window may not detect the resistance and will not stop and reverse direction.

Power window lock button

OKH043027N

The driver can disable the power window switches on the rear passengers' doors by pressing the power window lock switch. The indicator will be illuminated.

When the power window lock switch indicator is illuminated :

- The driver's master control can operate all the power windows.
- The front passenger's control can operate the front passenger's power window.
- The rear passenger's control cannot operate the rear passenger's power window.

⚠ CAUTION

■ Opening / closing Window

To prevent possible damage to the power window system, do not open or close two windows or more at the same time. This will also ensure the longevity of the fuse.

⚠ WARNING

■ Power windows

Do not allow children to play with the power windows. Keep the driver's door power window lock button in the LOCK position (illuminated).

Always double check to make sure all arms, hands, head and other obstructions are safely out of the way before closing a window.

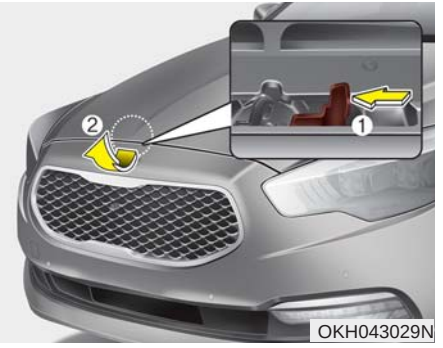
HOOD

Opening the hood

OKH043028N

1. Pull the release lever to unlatch the hood. The hood should pop open slightly.

Open the hood after turning off the engine on a flat surface, shifting the shift lever to the P (Park) position for automatic transaxle and to the 1st (First) gear or R (Reverse) for manual transaxle, and setting the parking brake.



OKH043029N

2. Go to the front of the vehicle, raise the hood slightly, push the secondary latch (1) left of the hood center and lift the hood (2).
3. Raise the hood. It will raise completely by itself after it has been raised about halfway.

⚠ WARNING

- **Always double check to be sure that the hood is firmly latched before driving away. If it is not latched, the hood could fly open while the vehicle is being driven, causing a total loss of visibility, which might result in an accident.**
- **Do not move the vehicle with the hood raised. The view will be blocked and the hood could fall or be damaged.**

Closing the hood

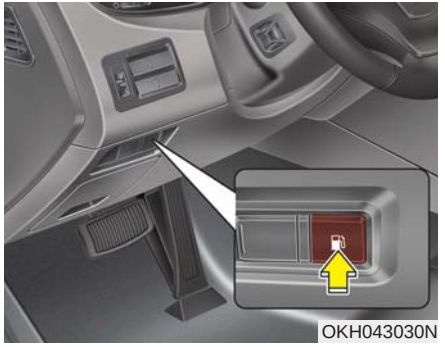
1.Before closing the hood, check the following:
   - All filler caps in engine compartment must be correctly installed.
   - Gloves, rags or any other combustible material must be removed from the engine compartment.
2.Lower the hood halfway and push down to securely lock in place.

⚠ WARNING

- **Before closing the hood, ensure that all obstructions are removed from the hood opening. Closing the hood with an obstruction present in the hood opening may result in property damage or severe personal injury.**
- **Do not leave gloves, rags or any other combustible material in the engine compartment. Doing so may cause a heat-induced fire.**

FUEL FILLER LID

Opening the fuel filler lid


OKH043030N

The fuel filler lid must be opened from inside the vehicle by pushing the fuel filler lid opener.

If the fuel filler lid does not open because ice has formed around it, tap lightly or push on the lid to break the ice and release the lid. Do not pry on the lid. If necessary, spray around the lid with an approved de-icer fluid (do not use radiator anti-freeze) or move the vehicle to a warm place and allow the ice to melt.

OKH043032N

1. Stop the engine.
2. To open the fuel filler lid, push the fuel filler lid opener up.
3. Pull open the fuel filler lid (1) out to fully open.
4. To remove the cap turn the fuel filler cap (2) counterclockwise.
5. Refuel as needed.

Closing the fuel filler lid

1. To install the cap, turn it clockwise until it "clicks" once. This indicates that the cap is securely tightened.
2. Close the fuel filler lid and push it lightly and make sure that it is securely closed.

⚠ WARNING

■ Refueling

Always remove the fuel cap carefully and slowly. If the cap is venting fuel or if you hear a hissing sound, wait until the condition stops before completely removing the cap.

If pressurized fuel sprays out, it can cover your clothes or skin and subject you to the risk of fire and burns.

Always check that the fuel cap is installed securely to prevent fuel spillage in the event of an accident.

⚠ WARNING

■ Fire/explosion risk

Read and follow all warnings posted at the gas station facility. Failure to follow all warnings will result in severe personal injury, severe burns or death due to fire or explosion.

⚠ WARNING

■ Static electricity

- **Before touching the fuel nozzle, you should eliminate potentially dangerous static electricity discharge by touching another metal part of the vehicle, a safe distance away from the fuel filler neck, nozzle, or other gas source.**
- **Do not get back into a vehicle once you have begun refueling since you can generate static electricity by touching, rubbing or sliding against any item or fabric (polyester, satin, nylon, etc.) capable of producing static electricity. Static electricity discharge can ignite fuel vapors resulting in rapid burning. If you must re-enter the vehicle, you should once again eliminate potentially dangerous static electricity discharge by touching a metal part of the vehicle, away from the fuel filler neck, nozzle or other gasoline source.**

✻ NOTICE

When using an approved portable fuel container, be sure to place the container on the ground prior to refueling. Static electricity discharge from the container can ignite fuel vapors causing a fire. Once refueling has begun, contact with the vehicle should be maintained until the filling is complete. Use only approved portable plastic fuel containers designed to carry and store gasoline.

⚠ WARNING

■ Cell phone fires

Do not use cellular phones while refueling. Electric current and/or electronic interference from cellular phones can potentially ignite fuel vapors causing a fire.

⚠ WARNING

■ Refueling& Vehicle fires

When refueling, always shut the engine off. Sparks produced by electrical components related to the engine can ignite fuel vapors causing a fire. Once refueling is complete, check to make sure the filler cap and filler door are securely closed, before starting the engine.

⚠ WARNING

■ Smoking

DO NOT use matches or a lighter and DO NOT SMOKE or leave a lit cigarette in your vehicle while at a gas station especially during refueling. Automotive fuel is highly flammable and can, when ignited, result in fire.

Make sure to refuel your vehicle according to the "Fuel requirements" suggested in chapter 1.

If the fuel filler cap requires replacement, use only a genuine Kia cap or the equivalent specified for your vehicle. An incorrect fuel filler cap can result in a serious malfunction of the fuel system or emission control system.

⚠ CAUTION

■ Exterior paint

Do not spill fuel on the exterior surfaces of the vehicle. Any type of fuel spilled on painted surfaces may damage the paint.

Emergency fuel filler lid release

OKH043031N

If the fuel filler lid does not open using the remote fuel filler lid release, you can open it manually by pulling the handle outward slightly.

⚠ CAUTION

Do not pull the handle excessively, otherwise the luggage area trim or release handle may be damaged.

PANORAMIC SUNROOF (IF EQUIPPED)

OKH043033N

If your vehicle is equipped with a sunroof, you can slide or tilt your sunroof with the sunroof control lever located on the overhead console.

The sunroof can only be opened, closed, or tilted when the ignition switch is in the ON position.

In cold and wet climates, the sunroof may not work properly due to freezing conditions.

After the vehicle is washed or in a rainstorm, be sure to wipe off any water that is on the sunroof before operating it.

⚠ CAUTION

■ Sunroof control lever

Do not continue to press the sunroof control lever after the sunroof is fully opened, closed, or tilted. Damage to the motor or system components could occur.

The sunroof cannot slide when it is in the tilt position nor can it be tilted while in an open or slide position.

Sunroof open warning (if equipped)

■ Type A

■ Type B

OKH043402N

If the driver turns off the engine when the sunroof is not fully closed, the warning chime will sound for a few seconds and a warning message will appear on the LCD display.

Close the sunroof securely when leaving your vehicle.

Sliding the sunroof

When the sunshade is closed

If you pull the sunroof control lever backward to the second detent position, the sunshade will slide all the way open, then the sunroof glass will slide all the way open. To stop the sunroof movement at any point, pull or push the sunroof control lever momentarily.

When the sunshade is opened

If you pull the sunroof control lever backward, the sunroof glass will slide all the way open. To stop the sunroof movement at any point, pull or push the sunroof control lever momentarily.

Closing the sunroof

To close the sunroof glass only

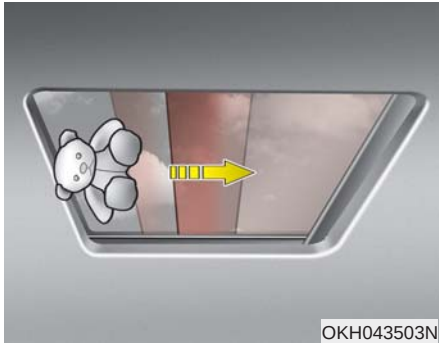
Push the sunroof control lever forward to the first detent position or pull the lever downward.

To close the sunroof glass with the sunshade

Push the sunroof control lever forward to the second detent position. The sunroof glass will close, then the sunshade close automatically.

To stop the sunroof movement at any point, pull or push the sunroof control lever momentarily.

Automatic reversal


OKH043503N

If an object or part of the body is detected while the sunroof glass or sunshade is closing automatically, it will reverse the direction, and then stop.

The auto reverse function does not work if a tiny obstacle is between the sliding glass or sunshade and the sunroof sash. You should always check that all passengers and objects are away from the sunroof before closing it.

⚠ WARNING

■ Sunroof

Do not extend the face, neck, arms or body outside through the sunroof opening while driving or operating the sunroof.

⚠ CAUTION

- **Periodically remove any dirt that may accumulate on the guide rail.**
- **If you try to open the sunroof when the temperature is below freezing or when the sunroof is covered with snow or ice, the glass or the motor could be damaged.**

Tilting the sunroof

OKH043502N

When the sunshade is closed

If you push the sunroof control lever upward, the sunshade will slide all the way open, then the sunroof glass will tilt.

To stop the sunroof movement at any point, pull or push the sunroof control lever momentarily.

When the sunshade is opened

If you push the sunroof control lever upward, the sunroof glass will tilt.

To stop the sunroof movement at any point, pull or push the sunroof control lever momentarily.

⚠ CAUTION

■ Sunroof motor damage

If you try to open the sunroof when the temperature is below freezing or when the sunroof is covered with snow or ice, the glass or the motor could be damaged.

Sunshade

OKH043504N

- To open the sunshade, pull the sunroof control lever backward to the first detent position.
- To close the sunshade when the sunroof glass is closed, push the sunroof control lever forward.

To stop the sliding at any point, pull or push the sunroof control lever momentarily.

✻ NOTICE

It is normal for wrinkles to form on the blind because of its material characteristic.

Resetting the sunroof

Whenever the vehicle battery is disconnected or discharged, or related fuse is blown, you must reset your sunroof system as follows:

1. The Engine Start/Stop Button must be in the ON position.
2. Release the control lever.
3. Push and hold the control lever forward (for more than 10 seconds) until the sunroof tilts and slightly moves. Then, release the lever.
4. Push the sunroof control lever forward in the direction of close until the sunroof operates as follows:

   Sunroof glass and sunshade open → Sunroof glass and sunshade close

   Then, release the control lever.

   When this is complete, the sunroof system is reset.

✻For more detailed information, contact an authorized K900 Kia dealer.

✻ NOTICE

If the sunroof is not reset when the vehicle battery is disconnected or discharged, or related fuse is blown, the sunroof may operate improperly.

STEERING WHEEL

Electronic Hydraulic Power Steering (EHPS)

This system uses an electromotor to assist you with steering the vehicle.

If the engine is turned off or if the EHPS becomes inoperative, you may still steer the vehicle, but it will require increased steering effort.

Should you notice any change in the effort required to steer during normal vehicle operation, have the EHPS checked by an authorized K900 Kia dealer.

⚠ CAUTION

Do not hold the steering wheel to the extreme right or left for more than five (5) seconds with the engine running. This may cause damage to the EHPS motor pump.

✻ NOTICE

If the EHPS motor pump malfunctions, the steering effort will greatly increase.

✻ NOTICE

If the vehicle is parked for extended periods outside in cold weather (below 14°F/-10°C), the power steering may require increased effort when the engine is first started. This is caused by increased fluid viscosity due to the cold weather and does not indicate a malfunction.
When this happens, increase the engine RPM by depressing accelerator until the RPM reaches 1,500 rpm then release or let the engine idle for two or three minutes to warm up the fluid.

Tilt Steering/Telescope Steering

OKH043042N

Adjust the steering wheel angle (2) and position (3) with the knob (1) on the steering column. Move the steering wheel, so it points toward your chest, not toward your face. Make sure you can see the instrument panel warning lights and gauges. After adjusting, push the steering wheel both up and down to be certain it is locked in position. Always adjust the position of the steering wheel before driving.

⚠ WARNING

■ **Steering wheel adjustment**

Never adjust the angle and height of the steering wheel while driving. You may lose steering control.

Heated steering wheel (if equipped)

OKH043043N

When the Engine Start/Stop Button is in the ON position, press the heated steering wheel button to warm the steering wheel. The indicator on the button will illuminate.

To turn the heated steering wheel off, press the button once again. The indicator on the button will turn off and notify you on the LCD display.

⚠ CAUTION

Do not install any grip to operate the steering wheel. This causes damage to the heated steering wheel system.

⚠ WARNING

If the steering wheel becomes too warm, turn the system off. The heated steering wheel may cause burns even at low temperatures, especially if used for long periods of time.

Horn

OKH043044N

To sound the horn, press the horn symbol on your steering wheel. Check the horn regularly to be sure it operates properly.

To sound the horn, press the area indicated by the horn symbol on your steering wheel (see illustration). The horn will operate only when this area is pressed.

MIRRORS

Inside rearview mirror

Adjust the rearview mirror so that the center view through the rear window is seen. Make this adjustment before you start driving.

Do not place objects in the rear seat which would interfere with your vision through the rear window.

⚠ WARNING

■ Mirror adjustment

Do not adjust the rearview mirror while the vehicle is moving. This could result in loss of control.

Electric chromic mirror (ECM) with HomeLink® system and compass (if equipped)

Your vehicle may be equipped with a Gentex Automatic-Dimming Mirror with a Z-Nav® Electronic Compass Display and an Integrated HomeLink® Wireless Control System.

During nighttime driving, this feature will automatically detect and reduce rearview mirror glare while the compass indicates the direction the vehicle is pointed. The HomeLink® Universal Transceiver allows you to activate your garage door(s), electric gate, home lighting, etc.

OKH043505N

(1) Channel 1 button
(2) Channel 2 button
(3) Status indicator LED
(4) Channel 3 button
(5) Rear light sensor
(6) Dimming ON/OFF button
(7) Compass control button
(8) Compass display

Automatic-Dimming Night Vision Safety™ (NVS®) Mirror

The NVS® Mirror in your vehicle is the most advanced way to reduce annoying glare in the rearview mirror during any driving situation. For more information regarding NVS® mirrors and other applications, please refer to the Gentex website:

www.gentex.com

❊Night Vision Safety™ is a registered trademark of Gentex Corporation.

⚠ CAUTION

The NVS® Mirror automatically reduces glare during driving conditions based upon light levels monitored in front of the vehicle and from the rear of the vehicle. These light sensors are visible through openings in the front and rear of the mirror case. Any object that obstructs either light sensor will degrade the automatic dimming control feature.

Automatic-dimming function

Your mirror will automatically dim upon detecting glare from the vehicles traveling behind you. The auto-dimming function can be controlled by the Dimming ON/OFF Button:

1. Pressing the ⏻ button turns the auto-dimming function OFF which is indicated by the green Status Indicator LED turning off.
2. Pressing the ⏻ button again turns the auto-dimming function ON which is indicated by the green Status Indicator LED turning on.

✻ NOTICE

The mirror defaults to the ON position each time the vehicle is started.

Z-Nav™ Compass Display

The NVS® Mirror in your vehicle is also equipped with a Z-NAV™ Compass that shows the vehicle Compass heading in the Display Window using the 8 basic cardinal headings (N, NE, E, SE, etc.).

❊ Z-Nav™ is a registered trademark of Gentex Corporation.

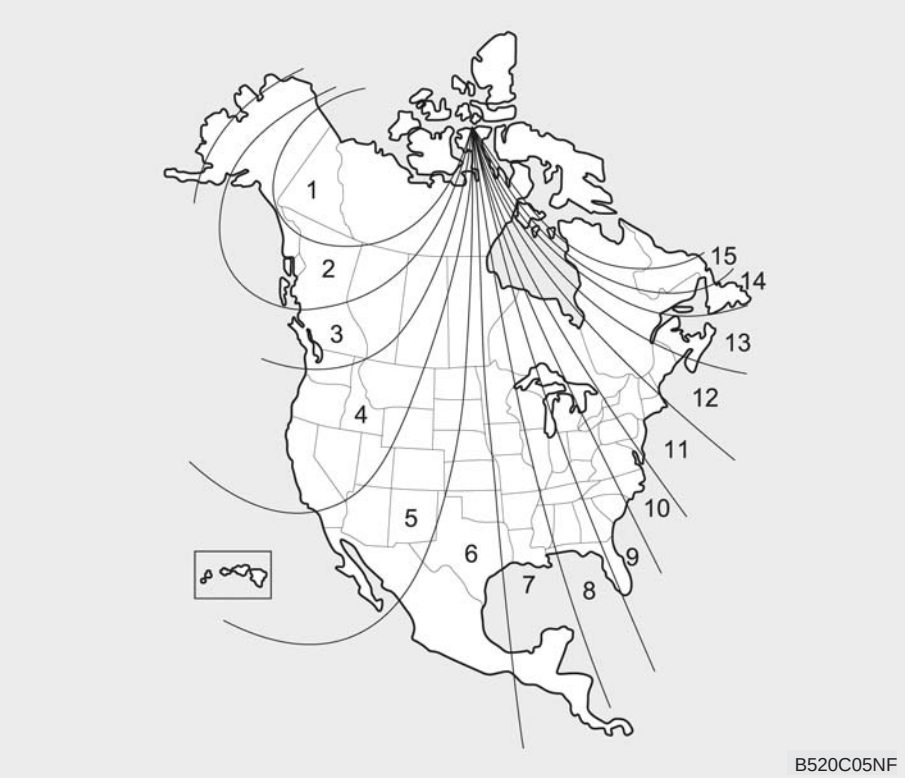
Compass function

The Compass can be turned ON and OFF and will remember the last state when the ignition is cycled. To turn the display feature ON/OFF:

1. Press and release the button to turn the display feature OFF.
2. Press and release the button again to turn the display back ON.

Additional options can be set with press and hold sequences of the button and are detailed below.

There is a difference between magnetic north and true north. The compass in the mirror can compensate for this difference when it knows the Magnetic Zone in which it is operating. This is set either by the dealer or by the user. The operating Zone Numbers for North America are shown in the figure on the following section.



To adjust the Zone setting:

1. Determine the desired Zone Number based upon your current location on the Zone Map.
2. Press and hold the ✣ button for more than 3, but less than 6 seconds, the current Zone Number will appear on the display.
3. Pressing and holding the ✣ button again will cause the numbers to increment (Note: they will repeat …13, 14, 15, 1, 2, …). Releasing the button when the desired Zone Number appears on the display will set the new Zone.
4. Within about 5 seconds, the compass will start displaying a compass heading again.

There are some conditions that can cause changes to the vehicle magnets, such as installing a ski rack or a CB antenna. Body repair work on the vehicle can also cause changes to the vehicle's magnetic field. In these situations, the compass will need to be re-calibrated to quickly correct for these changes. To re-calibrate the compass:

1. Press and hold the ✣ button for more than 6 seconds. When the compass memory is cleared, a "C" will appear in the display.
2. To calibrate the compass, drive the vehicle in 2 complete circles at less than 5 mph (8 km/h).

Integrated HomeLink® Wireless Control System

The HomeLink® Wireless Control System provides a convenient way to replace up to three hand-held radio-frequency (RF) transmitters with a single built-in device. This innovative feature will learn the radio frequency codes of most current transmitters to operate devices such as gate operators, garage door openers, entry door locks, security systems, even home lighting. Both standard and rolling code-equipped transmitters can be programmed by following the outlined procedures. Additional HomeLink® information can be found at: www.homelink.com or by calling 1-800-355-3515.

❉HomeLink® is a registered trademark of Johnson Controls, Inc.

⚠ CAUTION

Before programming HomeLink® to a garage door opener or gate operator, make sure that people and objects are out of the way of the device to prevent potential harm or damage. Do not use HomeLink® with any garage door opener that lacks the safety stop and reverse features required by U.S. federal safety standards (this includes any garage door opener model manufactured before April 1, 1982). A garage door that cannot detect an object - signaling the door to stop and reverse - does not meet current U.S. federal safety standards. Using a garage door opener without these features increases the risk of serious injury or death.

Retain the original transmitter of the RF device you are programming for use in other vehicles as well as for future HomeLink® programming. It is also suggested that upon the sale of the vehicle, the programmed HomeLink® buttons be erased for security purposes.

Programming HomeLink®

✻ NOTICE

- **When programming a garage door opener, it is advised to park the vehicle outside of the garage.**
- **It is recommended that a new battery be placed in the hand-held transmitter of the device being programmed to HomeLink® for quicker training and accurate transaxle of the radio-frequency signal.**
- **Some vehicles may require the ignition switch to be turned to the second (or "accessories") position for programming and/or operation of HomeLink®.**
- **In the event that there are still programming difficulties or questions after following the programming steps listed below, contact HomeLink® at: www.homelink.com or 1-800-355-3515.**

Standard programming

To train most devices, follow these instructions:

1. For first-time programming, press and hold the two outside buttons, HomeLink® Channel 1 and Channel 3 Buttons, until the indicator light begins to flash (after 20 seconds). Release both buttons. Do not hold the buttons for longer than 30 seconds.
2. Position the end of your hand-held transmitter 1-3 inches (2-8 cm) away from the HomeLink® buttons while keeping the indicator light in view.
3. Simultaneously press and hold both the HomeLink® and hand-held transmitter button. DO NOT release the buttons until step 4 has been completed.
4. While continuing to hold the buttons the red Indicator Status LED will flash slowly and then rapidly after HomeLink® successfully trains to the frequency signal from the hand-held transmitter. Release both buttons.
5. Press and hold the just-trained HomeLink® button and observe the red Status Indicator LED. If the indicator light stays on constantly, programming is complete and your device should activate when the HomeLink® button is pressed and released.
6. To program the remaining two HomeLink® buttons, follow steps 2 through 5.

Rolling code programming

Rolling code devices which are "code-protected" and manufactured after 1996 may be determined by the following:

- Reference the device owner's manual for verification.
- The handheld transmitter appears to program the HomeLink® Universal Transceiver but does not activate the device.
- Press and hold the trained HomeLink® button. The device has the rolling code feature if the indicator light flashes rapidly and then turns solid after 2 seconds.

To train rolling code devices, follow these instructions:

1. At the garage door opener receiver (motor-head unit) in the garage, locate the "learn" or "smart" button. This can usually be found where the hanging antenna wire is attached to the motor-head unit. Exact location and color of the button may vary by garage door opener brand.

   If there is difficulty locating the training button, reference the device owner's manual or please visit our Web site at www.homelink.com.

2. Firmly press and release the "learn" or "smart" button (which activates the "training light").

✻ NOTICE

There are 30 seconds in which to initiate step 3.

3. Return to the vehicle, firmly press and hold for two seconds the desired HomeLink® button then release. Repeat the "press/hold/release" sequence a second time to complete the programming. (Some devices may require you to repeat this sequence a third time to complete the programming.)

4. Press and hold the just-trained HomeLink® button and observe the red Status Indicator LED. If the indicator light stays on constantly, programming is complete and your device should activate.

5. To program the remaining two HomeLink® buttons, follow either steps 1 through 4 above for other Rolling Code devices or steps 2 through 5 in Standard Programming for standard devices.

Gate operator & Canadian programming

During programming, your handheld transmitter may automatically stop transmitting. Continue to press the Integrated HomeLink® Wireless Control System button (note steps 2 through 4 in the Standard Programming portion of this document) while you press and re-press ("cycle") your handheld transmitter every two seconds until the frequency signal has been learned. The indicator light will flash slowly and then rapidly after several seconds upon successful training.

Operating HomeLink®

To operate, simply press and release the programmed HomeLink® button. Activation will now occur for the trained device (i.e. garage door opener, gate operator, security system, entry door lock, home/office lighting, etc.). For convenience, the hand-held transmitter of the device may also be used at any time.

Reprogramming a single HomeLink® button

To program a new device to a previously trained HomeLink® button, follow these steps:

1. Press and hold the desired HomeLink® button. Do NOT release until step 4 has been completed.
2. When the indicator light begins to flash slowly (after 20 seconds), position the handheld transmitter 1 to 3 inches away from the HomeLink® surface.
3. Press and hold the handheld transmitter button. The HomeLink® indicator light will flash, first slowly and then rapidly.
4. When the indicator light begins to flash rapidly, release both buttons.
5. Press and hold the just-trained HomeLink® button and observe the red Status Indicator LED. If the indicator light stays on constantly, programming is complete and your new device should activate.

Erasing HomeLink® buttons

Individual buttons cannot be erased. However, to erase all three programmed buttons:

1. Press and hold the two outer HomeLink® buttons until the indicator light begins to flash-after 20 seconds.
2. Release both buttons. Do not hold for longer than 30 seconds.

The Integrated HomeLink® Wireless Control System is now in the training (learn) mode and can be programmed at any time following the appropriate steps in the Programming sections above.

FCC ID: NZLZTVHL3

IC: 4112A-ZTVHL3

Pursuant to Code of Federal Regulations, Title 47, Part 15 ("FCC Rules")

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

⚠ WARNING

The transceiver has been tested and complies with FCC and Industry Canada rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

NVS® and Z-NAV™ are registered trademarks. Nav® are of Gentex Corporation, Zeeland, Michigan.

HomeLink® is a registered trademark owned by Johnson Controls Technology Company, Holland, Michigan.

Outside rearview mirror

Be sure to adjust mirror angles before driving.

Your vehicle is equipped with both left-hand and right-hand outside rearview mirrors. The mirrors can be adjusted remotely with the remote switch. The mirror heads can be folded to prevent damage during an automatic car wash or when passing through a narrow street.

The right outside rearview mirror is convex. Objects seen in the mirror are closer than they appear.

Use your interior rearview mirror or direct observation to determine the actual distance of following vehicles when changing lanes.

⚠ CAUTION

■ Rearview mirror

Do not scrape ice off the mirror face; this may damage the surface of the glass. If ice should restrict movement of the mirror, do not force the mirror for adjustment. To remove ice, use a deicer spray, or a sponge or soft cloth with very warm water.

⚠ WARNING

■ Mirror adjustment

Do not adjust or fold the outside rearview mirrors while the vehicle is moving. This could result in loss of control.

Adjusting outside rearview mirror

Adjusting the rearview mirrors:

Press either the L (driver's side) or R (passenger's side) button (1) to select the rearview mirror you would like to adjust.

Use the mirror adjustment control (2) to position the selected mirror up, down, left or right.

After adjustment, press the L or R button (1) again to prevent inadvertent adjustment.

⚠ CAUTION

■ Outside mirror

- **The mirrors stop moving when they reach the maximum adjusting angles, but the motor continues to operate while the switch is pressed. Do not press the switch longer than necessary, the motor may be damaged.**
- **Do not attempt to adjust the outside rearview mirror by hand. Doing so may damage the parts.**

Reverse parking aid function (if equipped)

OKH043040N

While the vehicle is moving rearward, the outside rearview mirror(s) will move downward to aid reverse parking. According to the position of the outside rearview mirror switch (1), the outside rearview mirror(s) will operate as follows:

L/R : When the remote control outside rearview mirror switch is selected to the L (left) or R (right) position, both outside rearview mirrors will move downward.

Neutral : When the remote control outside rearview mirror switch is placed in the middle, the outside rearview mirrors will not operate while the vehicle is moving rearward.

The outside rearview mirrors will automatically revert to their original positions under the following conditions:

1. The ignition switch is in the OFF position.
2. Shift lever is moved to any position except R (Reverse).
3. Remote control outside rearview mirror switch is placed in the middle.

Folding the outside rearview mirror

OKH043049N

The outside rearview mirror can be folded or unfolded by pressing the switch as below.

Left (1) : The mirror will unfold.

Right (2) : The mirror will fold.

Center (AUTO, 3) :

The mirror will fold or unfold automatically as follows:

- The mirror will fold or unfold when the door is locked or unlocked by the smart key.
- The mirror will fold or unfold when the door is locked or unlocked by the button on the outside door handle.
- The mirror will unfold when you approach the vehicle (all doors closed and locked) with a smart key in possession.

⚠ CAUTION

■ Electric type outside rearview mirror

The electric type outside rearview mirror operates even though the engine start/stopo button is in the OFF position. However, to prevent unnecessary battery discharge, do not adjust the mirrors longer than necessary while the engine is not running.

In case it is an electric type outside rearview mirror, don't fold it by hand. It could cause motor failure.

Electric chromic mirror (ECM)

The electric chromic mirror automatically controls the glare from the headlights of the car behind you in nighttime or low light driving conditions. The sensor mounted in the mirror senses the light level around the vehicle, and automatically controls the headlight glare from vehicles behind you.

When the engine is running, the glare is automatically controlled by the sensor mounted in the rearview mirror.

Whenever the shift lever is shifted into R (Reverse), the mirror will automatically go to the brightest setting in order to improve the drivers view behind the vehicle. If the ECM of inside rear view mirror operates, it will be working.

⚠ CAUTION

When cleaning the mirror, use a paper towel or similar material dampened with glass cleaner. Do not spray glass cleaner directly on the mirror as that may cause the liquid cleaner to enter the mirror housing.

INSTRUMENT CLUSTER

■ Type A

■ Type B

1. Tachometer
2. Speedometer
3. Engine coolant temperature gauge
4. Fuel gauge
5. LCD display
6. Warning and indicator lights

❉ The actual cluster in the vehicle may differ from the illustration.
For more details, refer to the "Gauges" in this chapter.

OKH043050N/OKH043051N

Instrument Cluster Control

Adjusting Instrument Cluster Illumination

OKH043052N

The brightness of the instrument panel illumination can be adjusted by pressing the illumination control buttons (“+” or “-”) when the Engine Start/Stop Button is ON or the tale lights are turned on.

■ Type A

■ Type B

OKH043901N

- If you hold the illumination control button ("+" or "-"), the brightness will be changed continuously.
- If the brightness reaches to the maximum or minimum level, an alarm will sound.

LCD Display Control

OKH043087N

The LCD display modes can be changed by using the control buttons on the steering wheel.

(1) < , > : MODE button for changing modes.

(2) ∧ , ∨ : MOVE button for changing items

(3) OK : SELECT/RESET button for setting or resetting the selected item

❉For the LCD modes, refer to “LCD Display” in this chapter.

Gauges

Speedometer

■ Type A

OKH043055N

■ Type B

OKH043056N

The speedometer indicates the speed of the vehicle and is calibrated in miles per hour (mph) and/or kilometers per hour (km/h).

The unit of the speedometer (Type B) can be changed from km/h to MPH or from MPH to km/h on the LCD display.

❈From more details, refer to "LCD Display."

Tachometer

■ Type A

OKH043053N

■ Type B

OKH043054N

The tachometer indicates the approximate number of engine revolutions per minute (rpm).

Use the tachometer to select the correct shift points and to prevent lugging and/or over-revving the engine.

⚠ CAUTION

Do not operate the engine within the tachometer's RED ZONE. This may cause severe engine damage.

Engine Coolant Temperature Gauge

■ Type A

■ Type B

OKH043057N

This gauge indicates the temperature of the engine coolant when the engine is running.

⚠ CAUTION

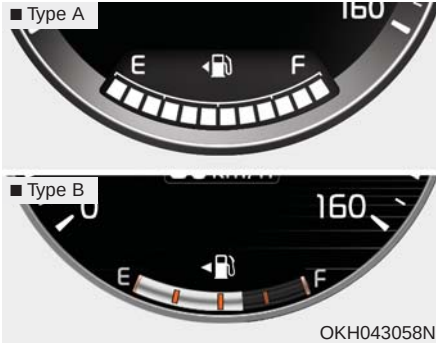
If the gauge pointer moves beyond the normal range area toward the "H" position, it indicates overheating that may damage the engine.

Do not continue driving with an overheated engine. If your vehicle overheats, refer to "If the Engine Overheats" in chapter 6.

⚠ WARNING

Never remove the radiator cap when the engine is hot. The engine coolant is under pressure and could severely burn. Wait until the engine is cool before adding coolant to the reservoir.

Fuel Gauge



This gauge indicates the approximate amount of fuel remaining in the fuel tank.

✻ NOTICE

- The fuel tank capacity is given in chapter 8.
- The fuel gauge is supplemented by a low fuel warning light, which will illuminate when the fuel tank is nearly empty.
- On inclines or curves, the fuel gauge pointer may fluctuate or the low fuel warning light may come on earlier than usual due to the movement of fuel in the tank.

⚠ WARNING

■ Fuel Gauge

Running out of fuel can expose vehicle occupants to danger.

You must stop and obtain additional fuel as soon as possible after the warning light comes on or when the gauge indicator comes close to the “E (Empty)” level.

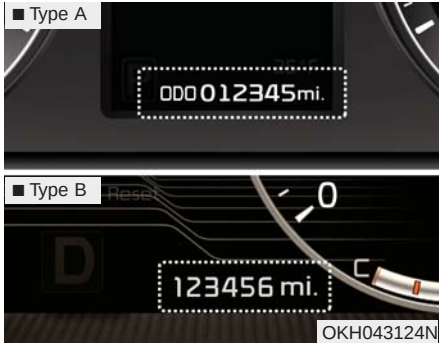
⚠ CAUTION

Avoid driving with a extremely low fuel level. Running out of fuel could cause the engine to misfire damaging the catalytic converter.

✻ NOTICE

Fuel display may not be accurate if you are filling in sloping places.

Odometer



The odometer Indicates the total distance that the vehicle has been driven and should be used to determine when periodic maintenance should be performed.

- Odometer range : 0 ~ 999999 miles or kilometers.

Outside Temperature Gauge

This gauge indicates the current outside air temperatures by 1°F (1°C).

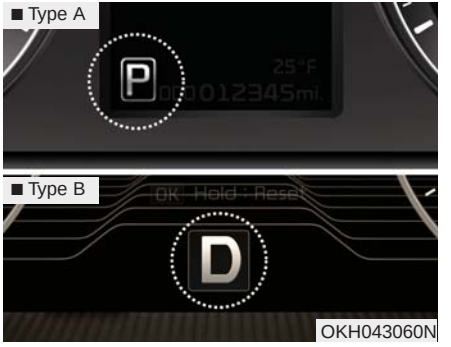
- Temperature range : -40°F ~ 140°F (-40°C ~ 60°C)

The outside temperature on the display may not change immediately like a general thermometer to prevent the driver from being inattentive.

The temperature unit (from °C to °F or from °F to °C) can be changed by pressing the OFF button and AUTO button on the front climate control panel for 3 seconds simultaneously.

Transaxle Shift Indicator

Automatic Transaxle Shift Indicator



This indicator displays which automatic transaxle shift lever is selected.

- Park : P
- Reverse : R
- Neutral : N
- Drive : D
- Sports Mode : 1, 2, 3, 4, 5, 6, 7, 8

LCD DISPLAY

LCD Modes

Modes	Symbol	Explanation
Trip Computer		This mode displays driving information like the tripmeter, fuel economy, and so on. For more details, refer to “Trip Computer” in this chapter.
Turn By Turn		This mode displays the state of the navigation.
ASCC/LDWS (if equipped)		This mode displays the state of the Advanced Smart Cruise Control system (ASCC) and Lane Departure Warning System (LDWS). For more details, refer to "Advanced Smart Cruise Control system (ASCC)" or "Lane Departurn Warning System (LDWS)" in chapter 5.
A/V		This mode displays the state of the A/V system.
Information		This mode informs of service interval (mileage or days) and pressure status of each tire.
User Settings		On this mode, you can change settings of the doors, lamps and so on.

❈ For controlling the LCD modes, refer to "LCD Display Control" in this chapter.

Trip Computer Mode

■ Type A

■ Type B

OKH043408N

This mode displays driving information like the tripmeter, fuel economy, and so on.

❊For more details, refer to “Trip Computer” in this chapter.

Turn By Turn (TBT) Mode

OKH043400N

This mode displays the state of the navigation.

ASCC/LDWS Mode (if equipped)

ASCC

LDWS

OKH043411N

This mode displays the state of the Advanced Smart Cruise Control (ASCC) or Lane Departure Warning System (LDWS).

❊ For more details, refer to "Advanced Smart Cruise Control (ASCC)" and "Lane Departure Warning System (LDWS)" in chapter 5.

A/V Mode

OKH043404N

This mode displays the state of the A/V system.

Information Mode

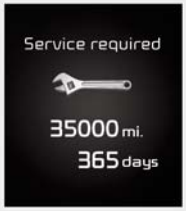
This mode shows the service interval (mileage and days) and pressure of each tire.

To change the information mode, Press the ∧, ∨ (MOVE) button.

❈ For the setting of the service interval, refer to "User Settings Mode" of the LCD display.

Service Interval

■ Type A



■ Type B

OKH043412N

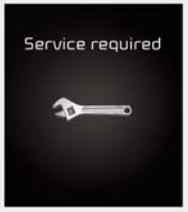
Service required

It calculates and displays when you need a scheduled maintenance service (mileage or days).

If the remaining mileage or time reaches 900 miles (1,500 km) or 30 days, "Service required" message is displayed for several seconds each time you set the Engine Start/Stop Button to the ON position.

Service required

■ Type A



■ Type B

OKH043413N

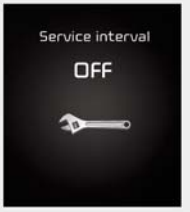
If you do not have your vehicle serviced according to the already inputted service interval, "Service required" message is displayed for several seconds each time you set the Engine Start/Stop Button to the ON position.

To reset the service interval to the mileage and days you inputted before:

- Press the OK button for more than 1 second.

Service interval OFF

■ Type A



■ Type B

OKH043405N

If the service interval is not set, "Service interval OFF" message is displayed on the LCD display.

✻ NOTICE

If any of the following conditions occurs, the mileage and days may be incorrect.

- **The battery cable is disconnected.**
- **The fuse switch is turned off.**
- **The battery is discharged.**

Tire Pressure

OKH043403N

This mode displays the pressure status of each tire.

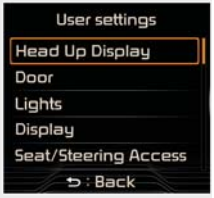
You can change the tire pressure unit in "User settings" mode.

✻For more details, refer to "User Settings mode" in this chapter.

User Settings Mode

■ Type A

■ Type B



OKH043401N

On this mode, you can change setting of the doors, lights, and so on.

Head-Up Display (HUD) (if equipped)

Items	Explanation
Display Height	Adjust the height of the HUD image on the windshield glass.
Brightness	Adjust the intensity of the HUD brightness
Contents Selection	Activate or deactivate each contents of the HUD (TBT*, ASCC*, LDWS*, BSD*). ❊ TBT : Turn By Turn ASCC : Advanced Smart Cruise Control LDWS : Lane Departure Warning System BSD : Blind Spot Detection * : if equipped
Speedometer Size	Choose the size of the HUD speedometer (Small, Medium, Large).
Speedometer Color	Choose the color of the HUD speedometer (White, Orange, Green).

✻ NOTICE

If you select the Turn By Turn (TBT) navigation information as HUD contents, the Turn By Turn (TBT) navigation information will not be displayed on the LCD.

Door

Items	Explanation
Automatically Lock	• Off : The auto door lock operation will be deactivated. • Enable on Speed : All doors will be automatically locked when the vehicle speed exceeds 9.3mph (15km/h) • Enable on Shift : All doors will be automatically locked if the automatic transmission shift lever is shifted from the P (Park) position to the R (Reverse), N (Neutral), or D (Drive) position.
Automatically Unlock	• Off: The auto door unlock operation will be canceled. • Vehicle Off : All doors will be automatically unlocked when the Engine Star/Stop Button is set to the OFF position. • Driver Door Unlock : All doors will be automatically unlocked if the driver's door is unlocked • On Shift to P : All doors will be automatically unlocked if the automatic transmission shift lever is shifted to the P (Park) position.
Two Press Unlock	• Off (Unchecked) : The two press unlock function will be deactivated.Therefore, all doors will unlock if the door is unlocked. • On: (checked) : The driver's door will unlock if the door is unlocked.When the door is unlocked again within 4 seconds, all doors will unlock.
Door Lock Sound	Activate or deactivate door lock confirm sound.

Display (for Type B Cluster)

Items	Explanation
Theme	Choose the instrument cluster theme. (Default or Retro)
Auto Theme change	• On (checked) : The instrument cluster theme is automatically changed. • Off : The automatic change function of the instrument cluster theme will be deactivated
Traffic Alerts	• On(checked) : The LCD display will show traffic information. • Off(unchecked) : The LCD display will not show traffic information.
Speedometer Size	Choose the size of the number in the speedometer (Small, Medium, Large).
Speedometer Unit	Choose the main unit of the speedometer (MPH or km/h).

Lights

Items	Explanation
One Touch Turn Signal	• Off: The one touch turn lamp function will be deactivated. • 3, 5, 7 Flashing : The lane change signals will blink 3, 5, or 7 times when the turn signal lever is moved slightly. ❉ For more details, refer to “Lighting” in this chapter.
Head Lamp Delay	Activate or deactivate the head lamp delay function. ❉ For more details, refer to “Lighting” in this chapter.
Welcome Light	Activate or deactivate the welcome light function. ❉ For more details, refer to “Welcome system” in this chapter.

Seat/Steering

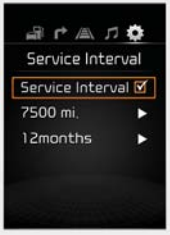
Items	Explanation
Seat Easy Access	• None : The seat easy access function will be deactivated. • Normal/Enhanced: - When you turn off the engine, the driver's seat will automatically move rearward by 2 inches (Normal) or 3 inches (Enhanced) for you to enter or exit the vehicle more comfortably. - If you change the Engine Start/Stop Button from OFF position to the ACC, ON, or START position, the driver's seat will return to the original position. ❊ For more details, refer to "Driver Position Memory System" in chapter 3.
Steering Easy Access	• On (checked) : The steering wheel will automatically move forward or rearward for the driver to enter or exit the vehicle comfortably. • Off (unchecked) : The steering easy access function will be deactivated. ❊ For more details, refer to "Driver Position Memory System" in chapter 3.

Additional Features

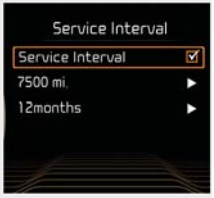
Items	Explanation
Advance Vehicle Safety Management (AVSM) (if equipped)	• On (checked) : The AVSM system will be activated. • Off (unchecked) : The AVSM system will be deactivated. ❉ For more details, refer to “Advanced Vehicle Safety Management (AVSM) System” in chapter 5. ❉ AVSM : Advanced Vehicle Safety Management
Fuel Economy Auto Reset	The average fuel economy will reset automatically when refueling.
Tire Pressure Unit	Choose the tire pressure unit. (psi, kPa, bar)

Service Interval

■ Type A



■ Type B



OKH043512N

On this mode, you can activate the service interval function with mileage (km or mi.) and period (months).

- Off : The service interval function will be deactivated.
- On : You can set the service interval (mileage and months).

Warning Messages

Shift to "P" position

■ Type A

■ Type B

OKH043921N

- This warning message illuminates if you try to turn off the engine without the shift lever in P (Park) position.
- At this time, the Engine Start/Stop Button turns to the ACC position (If you press the Engine Start/Stop Button once more, it will turn to the ON position).

Low Key Battery

■ Type A

■ Type B

OKH043922N

- This warning message illuminates if the battery of the smart key is discharged when the Engine Start/Stop Button changes to the OFF position.

Check headlamp LED (if equipped)

■ Type A

■ Type B

OKH043514N

- This warning message illuminates if the headlamp does not turned on normally when you turn the head lamp on.

  In this case, have your vehicle inspected by an authorized K900 Kia dealer.

Check headlamp FAN (if equipped)

■ Type A

■ Type B

OKH043513N

- This warning message illuminates if the headlamp is overheated.

  It means, the headlamp fan does not work normally.

  In this case, have your vehicle inspected by an authorized K900 Kia dealer as soon as possible.

Check battery voltage

■ Type A

■ Type B

OKH043515N

- This warning message illuminates if the battery voltage is abnormally low, or the battery has poor performance. In this case, have your vehicle inspected by an authorized K900 Kia dealer.

Press brake pedal to start engine

■ Type A

■ Type B

OKH043927N

- This warning message illuminates if the Engine Start/Stop Button changes to the ACC position twice by pressing the button repeatedly without depressing the brake pedal.
- It means that you should depress the brake pedal to start the engine.

Key not in vehicle

■ Type A

■ Type B

OKH043928N

- This warning message illuminates if the smart key is not in the vehicle while the door is opened or closed with the ignition switch in the ACC position or engine is running.
- It means that you should always have the smart key with you.

Key not detected

■ Type A

■ Type B

OKH043929N

- This warning message illuminates if the smart key is not detected when you press the Engine Start/Stop Button.

Press start button again

■ Type A

■ Type B

OKH043930N

- This warning message illuminates if you can not operate the Engine Start/Stop Button when there is a problem with the Engine Start/Stop Button system.
- It means that you could start the engine by pressing the Engine Start/ Stop Button once more.
- If the warning illuminates each time you press the Engine Start/Stop Button, have your vehicle inspected by an authorized K900 Kia dealer.

Press start button with smart key

■ Type A

■ Type B

OKH043931N

- This warning message illuminates if you press the Engine Start/Stop Button while the warning message “Key not detected” is illuminating.
- At this time, the immobilizer indicator light blinks.

Check fuse "BRAKE SWITCH"

■ Type A

■ Type B

OKH043932N

- This warning message illuminates if the brake switch fuse is disconnected.
- It means that you should replace the fuse with a new one. If that is not possible, you can start the engine by pressing the Engine Start/Stop Button for 10 seconds in the ACC position.

Shift to "P" or "N" to start engine

■ Type A

■ Type B

OKH043933N

- This warning message illuminates if you try to start the engine with the shift lever not in the P (Park) or N (Neutral) position.

✻ NOTICE

You can start the engine with the shift lever in the N (Neutral) position. But, for your safety, we recommend that you start the engine with the shift lever in the P (Park) position.

Press Start Button and Shift to "P"

■ Type A

■ Type B

OKH043924N

- This warning message illuminates if you try to turn off the engine without the shift lever in P (Park) position.
- At this time, the Engine Start/Stop Button turns to the ACC position (If you press the Engine Start/Stop Button once more, it will turn to the ON position).
- Set the Engine Start/Stop Button to the ON position, then shift to P (Park) by pressing the P button on the top of the shift lever.

Door / Hood / Trunk Open

■ Type A

■ Type B

OKH043934N

- It means that any door, hood, or trunk is open.

Sunroof Open (if equipped)

■ Type A

■ Type B

OKH043402N

- The warning message illuminates if you turn off the engine when the sunroof is open.

Align steering wheel

■ Type A

■ Type B

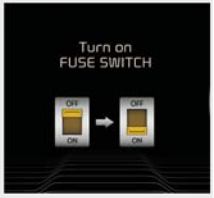
OKH043937N

- This warning message illuminates if you start the engine when the steering wheel is turned to more than 90 degrees to the left or right.
- It means that you should turn the steering wheel and make the angle of the steering wheel be less than 30 degrees.

Turn on "FUSE SWITCH"

■ Type A

■ Type B



OKH043938N

- This warning message illuminates if the fuse switch on the fuse box is OFF.
- It means that you should turn the fuse switch on.

For more details, refer to “Fuses” in chapter 7.

TRIP COMPUTER

Overview

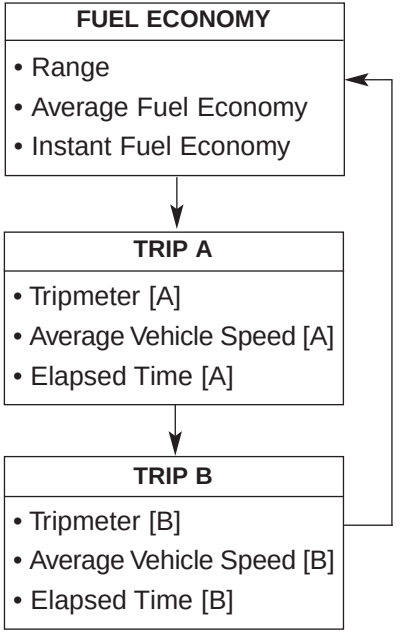
Description

The trip computer is a microcomputer-controlled driver information system that displays information related to driving.

✻ NOTICE

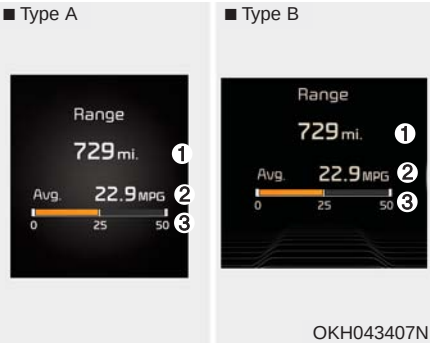
Some driving information stored in the trip computer (for example Average Vehicle Speed) resets if the battery is disconnected.

Trip Modes



To change the trip mode, press the ∧ , ∨ (MOVE) button.

Fuel Economy



OKH043407N

Range (1)

- The range is the estimated distance the vehicle can be driven with the remaining fuel.
  - Distance range : 30 ~ 990 mi or 50 ~ 990 km.
- If the estimated distance is below 30 mi. (50 km), the trip computer will display “---” as range.

✻ NOTICE

- **If the vehicle is not on level ground or the battery power has been interrupted, the range function may not operate correctly.**
- **The range may differ from the actual driving distance as it is an estimate of the available driving distance.**
- **The trip computer may not register additional fuel if less than 1.6 gallons (6 liters) of fuel are added to the vehicle.**
- **The fuel economy and range may vary significantly based on driving conditions, driving habits, and condition of the vehicle.**

Average Fuel Economy (2)

- The average fuel economy is calculated by the total driving distance and fuel consumption since the last average fuel economy reset.
  - Fuel economy range: 0.0 ~ 99.9 MPG or L/100km
- The average fuel economy can be reset both manually and automatically.

Manual reset

To clear the average fuel economy manually, press the OK (RESET) button on the steering wheel for more than 1 second when the average fuel economy is displayed.

Automatic reset

To make the average fuel economy be reset automatically whenever refueling, select the “Auto Reset” mode in User Setting menu of the LCD display (Refer to “LCD Display”).

Under “Auto Reset” mode, the average fuel economy will be cleared to zero (---) when the vehicle speed exceeds 1 km/h after refueling more than 1.6 gallons (6 liters).

✻ NOTICE

The average fuel economy is not displayed for more accurate calculation if the vehicle does not drive more than 0.19 miles (300 meters) since the Engine Start/Stop button is turned to ON.

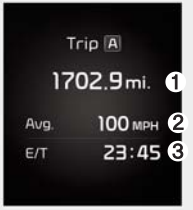
Instant Fuel Economy (3)

- This mode displays the instant fuel economy during the last few seconds when the vehicle speed is more than 6.2 MPH (10 km/h).
  - Fuel economy range: 0 ~ 50 MPG or 0 ~ 20 L/100km

Trip A/B

Tripmeter (1)

■ Type A



■ Type B

OKH043408N

- The tripmeter is the total driving distance since the last tripmeter reset.
  - Distance range: 0.0 ~ 9999.9 mi. or km
- To reset the tripmeter, press the OK (RESET) button on the steering wheel for more than 1 second when the tripmeter is displayed.

Average Vehicle Speed (2)

- The average vehicle speed is calculated by the total driving distance and driving time since the last average vehicle speed reset.
  - Speed range: 0 ~ 999 MPH or km/h
- To reset the average vehicle speed, press the OK (RESET) button on the steering wheel for more than 1 second when the average vehicle speed is displayed.

✻ NOTICE

- **The average vehicle speed is not displayed if the driving distance is less than 0.19 miles (300 meters) since the Engine Start/Stop button is turned to ON.**
- **Even if the vehicle is not in motion, the average vehicle speed keeps going while the engine is running.**

Elapsed Time (3)

- The elapsed time is the total driving time since the last elapsed time reset.

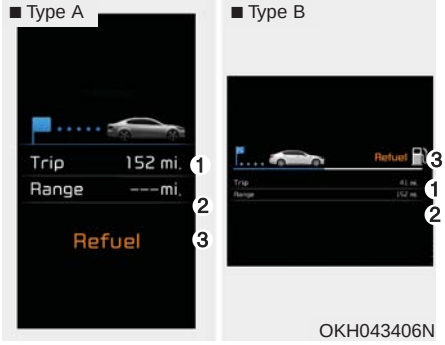
  - Time range (hh:mm): 00:00 ~ 99:59

- To reset the elapsed time, press the OK (RESET) button on the steering wheel for more than 1 second when the elapsed time is displayed.

✻ NOTICE

Even if the vehicle is not in motion, the elapsed time keeps going while the engine is running.

One time driving information mode



This display shows trip distance (1) and the vehicle can be driven with the remaining fuel (2).

This information is displayed for a few seconds when you turn off the engine and then goes off automatically. The information provided is calculated according to each trip.

If the estimated distance is below 30 mi. (50km), the distance to empty (2) will display as "---" and a refuel message will appear (3).

WARNING AND INDICATOR LIGHTS

Warning lights

✻ NOTICE - Warning lights

Make sure that all warning lights are OFF after starting the engine. If any light is still ON, this indicates a situation that needs attention.

Air bag Warning Light

This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 6 seconds and then goes off.
- When there is a malfunction with the SRS.

  In this case, have your vehicle inspected by an authorized K900 Kia dealer.

Seat Belt Warning Light

This warning light informs the driver that the seat belt is not fastened.

For more details, refer to the “Seat Belts” in chapter 3.

Parking Brake & Brake Fluid Warning Light

This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds
  - It remains on if the parking brake is applied.
- When the parking brake is applied.
- When the brake fluid level in the reservoir is low.
  - If the warning light illuminates with the parking brake released, it indicates the brake fluid level in reservoir is low.

If the brake fluid level in the reservoir is low:

1. Drive carefully to the nearest safe location and stop your vehicle.
2. With the engine stopped, check the brake fluid level immediately and add fluid as required (For more details, refer to “Brake Fluid” in chapter 7).

   Then check all brake components for fluid leaks. If any leaks in the brake system is still found, the warning light remains on, or the brakes do not operate properly, do not drive the vehicle.

   In this case, have your vehicle towed to an authorized K900 Kia dealer and inspected.

Dual-diagonal braking system

Your vehicle is equipped with dual-diagonal braking systems. This means you still have braking on two wheels even if one of the dual systems should fail.

With only one of the dual systems working, more than normal pedal travel and greater pedal pressure are required to stop the vehicle.

Also, the vehicle will not stop in as short a distance with only a portion of the brake system working.

If the brakes fail while you are driving, shift to a lower gear for additional engine braking and stop the vehicle as soon as it is safe to do so.

⚠ WARNING

■ Parking Brake & Brake Fluid Warning Light

Driving the vehicle with a warning light ON is dangerous. If the Parking Brake & Brake Fluid Warning Light illuminates with the parking brake released, it indicates that the brake fluid level is low.

In this case, have your vehicle inspected by an authorized K900 Kia dealer.

Anti-lock Brake System (ABS) Warning Light

This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the ABS (The normal braking system will still be operational without the assistance of the anti-lock brake system).

  In this case, have your vehicle inspected by an authorized K900 Kia dealer.

Electronic Brake force Distribution (EBD) System Warning Light

These two warning lights illuminate at the same time while driving:

- When the ABS and regular brake system may not work normally.

  In this case, have your vehicle inspected by an authorized K900 Kia dealer.

⚠ WARNING

■ **Electronic Brake force Distribution (EBD) System Warning Light**

When both ABS and Parking Brake & Brake Fluid Warning Lights are on, the brake system will not work normally and you may experience an unexpected and dangerous situation during sudden braking.

In this case, avoid high speed driving and abrupt braking.

Have your vehicle inspected by an authorized K900 Kia dealer as soon as possible.

✻ NOTICE - Electronic Brake force Distribution (EBD) System Warning Light

When the ABS Warning Light is on or both ABS and Parking Brake & Brake Fluid Warning Lights are on, the speedometer, odometer, or trip-meter may not work. Also, the EPS Warning Light may illuminate and the steering effort may increase or decrease.
In this case, have your vehicle inspected by an authorized K900 Kia dealer as soon as possible.

Malfunction Indicator Lamp (MIL)

This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It remains on until the engine is started.
- When there is a malfunction with the emission control system.
  In this case, have your vehicle inspected by an authorized K900 Kia dealer.

⚠ CAUTION

■ Malfunction Indicator Lamp (MIL)

Driving with the Malfunction Indicator Lamp (MIL) on may cause damage to the emission control systems which could effect drivability and/or fuel economy.

⚠ CAUTION

■ Gasoline Engine

If the Malfunction Indicator Lamp (MIL) illuminates, potential catalytic converter damage is possible which could result in loss of engine power.

In this case, have your vehicle inspected by an authorized K900 Kia dealer as soon as possible.

Charging System Warning Light

This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It remains on until the engine is started.
- When there is a malfunction with either the alternator or electrical charging system.

If there is a malfunction with either the alternator or electrical charging system:

1. Drive carefully to the nearest safe location and stop your vehicle.
2. Turn the engine off and check the alternator drive belt for looseness or breakage.

   If the belt is adjusted properly, there may be a problem in the electrical charging system.

   In this case, have your vehicle inspected by an authorized K900 Kia dealer as soon as possible.

Engine Coolant Temperature Warning Light

This warning light illuminates:

- When the engine coolant temperature is above 248°F (120°C). This means that the engine is overheated and may be damaged.

  If your vehicle is overheated, refer to “Overheating” in chapter 6.
- When your vehicle is overheated, the color of the engine coolant temperature symbol will change (white → red). (for type B cluster)

⚠ CAUTION

■ Engine Overheating

Do not continue driving with the engine overheated. Otherwise engine may be damaged.

Engine Oil Pressure Warning Light

This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It remains on until the engine is started.
- When the engine oil pressure is low.

If the engine oil pressure is low:

1. Drive carefully to the nearest safe location and stop your vehicle.
2. Turn the engine off and check the engine oil level (For more details, refer to “Engine Oil” in chapter 7). If the level is low, add oil as required.

   If the warning light remains on after adding oil or if oil is not available, have your vehicle inspected by an authorized K900 Kia dealer as soon as possible.

⚠ CAUTION

■ Engine Oil Pressure Warning Light

- **If the engine does not stop immediately after the Engine Oil Pressure Warning Light is illuminated, severe damage could result.**
- **If the warning light stays on while the engine is running, it indicates that there may be serious engine damage or malfunction. In this case,**
  1. **Stop the vehicle as soon as it is safe to do so.**
  2. **Turn off the engine and check the oil level. If the oil level is low, fill the engine oil to the proper level.**
  3. **Start the engine again. If the warning light stays on after the engine is started, turn the engine off immediately. In this case, have your vehicle inspected by an authorized K900 Kia dealer.**

Low Fuel Level Warning Light

This warning light illuminates:

- When the fuel tank is nearly empty.
- When the fuel tank is nearly empty, the color of the fuel level symbol will change (white → orange). (for type B cluster)

If the fuel tank is nearly empty:

Add fuel as soon as possible.

⚠ CAUTION

■ Low Fuel Level

Driving with the Low Fuel Level warning light on or with the fuel level below "E" can cause the engine to misfire and damage the catalytic converter (if equipped).

Low Tire Pressure Warning Light

This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When one or more of your tires are significantly underinflated (The location of the underinflated tires are displayed on the LCD display).

  For more details, refer to "Tire Pressure Monitoring System (TPMS)" in chapter 6.

This warning light remains on after blinking for approximately 60 seconds or repeats blinking on and off at the intervals of approximately 3 seconds:

- When there is a malfunction with the TPMS.

  In this case, have your vehicle inspected by an authorized K900 Kia dealer as soon as possible.

  For more details, refer to "Tire Pressure Monitoring System (TPMS)" in chapter 6.

⚠ WARNING

■ Low tire pressure

- **Significantly low tire pressure makes the vehicle unstable and can contribute to loss of vehicle control and increased braking distances.**
- **Continued driving or low pressure tires will cause the tires to overheat and fail.**

⚠ WARNING

■ Safe Stopping

- **The TPMS cannot alert you to severe and sudden tire damage caused by external factors.**
- **If you notice any vehicle instability, immediately take your foot off the accelerator pedal, apply the brakes gradually with light force, and slowly move to a safe position off the road.**

Door Ajar Warning Light

This warning light illuminates:

When a door is not closed securely.

Trunk Open Warning Light

This warning light illuminates:

When the trunk is not closed securely.

Adaptive Front Lighting System (AFLS) Warning Light (if equipped)

This warning light blinks:

- Once you set the Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the AFLS.

If there is a malfunction with the AFLS:

1. Drive carefully to the nearest safe location and stop your vehicle.
2. Turn the engine off and restart the engine. If the warning light remains on, have your vehicle inspected by an authorized K900 Kia dealer.

LED Headlamp Warning Light (if equipped)

This warning light illuminates:

- Once you set the Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the LED headlamp.

In this case, we recommend that you have the vehicle inspected by an authorized K900 Kia dealer.

This warning light blinks:

- When there is a malfunction with a LED headlamp related part.

In this case, we recommend that you have the vehicle inspected by an authorized K900 Kia dealer.

⚠ CAUTION

■ LED Headlamp Warning Light

Continuous driving with the LED Headlamp Warning Light on or blinking can reduce LED headlamp (low beam) life.

Electric Parking Brake (EPB) Warning Light

This warning light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the EPB.

  In this case, have your vehicle inspected by an authorized K900 Kia dealer.

✻ NOTICE - Electric Parking Brake (EPB) Warning Light

The Electric Parking Brake (EPB) Warning Light may illuminate when the Electronic Stability control (ESC) Indicator Light comes on to indicates that the ESC is not working properly (This does not indicate malfunction of the EPB).

Advanced Smart Cruise Control (ASCC) Warning Light (if equipped)

This warning light illuminates :

- When there is a malfunction with the advanced smart cruise control system.

In this case, have your vehicle inspected by an authorized K900 Kia dealer.

❊For more details, refer to "Advanced Smart Cruise Control System" in chapter 5.

Advanced Smart Cruise Control (ASCC) Radar Warning Light (if equipped)

This warning light illuminates:

- When the radar of the advanced smart cruise control system or its cover is stained.

Remove the stains with a soft cloth

❊For more details, refer to “Advanced Smart Cruise Control (ASCC) System” in chapter 5.

Indicator Lights

Electronic Stability Control (ESC) Indicator Light

This indicator light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the ESC system.

  In this case, have your vehicle inspected by an authorized K900 Kia dealer.

This indicator light blinks:

While the ESC is operating.

For more details, refer to “Electronic Stability Control (ESC)” in chapter 5.

Electronic Stability Control (ESC) OFF Indicator Light

This indicator light illuminates:

- Once you set the ignition switch or Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When you deactivate the ESC system by pressing the ESC OFF button.

For more details, refer to “Electronic Stability Control (ESC)” in chapter 5.

AUTO HOLD Indicator Light

This indicator light illuminates:

- [White] When you activate the auto hold system by pressing the AUTO HOLD button.
- [Green] When you stop the vehicle completely by depressing the brake pedal with the auto hold system activated.
- [Yellow] When there is a malfunction with the auto hold system.

  In this case, have your vehicle inspected by an authorized K900 Kia dealer.

❈For more details, refer to “Auto Hold” in chapter 5.

Lane Departure Warning System (LDWS) Indicator Light (if equipped)

This indicator light illuminates:

- [Green] When you activate the lane departure warning system by pressing the LDWS button.
- [Yellow] When there is a malfunction with the lane departure warning system.

  In this case, have your vehicle inspected by an authorized K900 Kia dealer.

❈For more details, refer to “Lane Departure Warning System (LDWS)” in chapter 5.

Advanced Vehicle Safety Management (AVSM) OFF Indicator Light (if equipped)

This indicator light illuminates:

- Once you set the Engine Start/Stop Button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When you deactivate the AVSM system by setting on the LCD display.

❈For more details, refer to “LCD Display” in this chapter.

If this indicator stays on when AVSM OFF is not selected, the AVSM may have malfunctioned.

In this case, have your vehicle inspected by an authorized K900 Kia dealer.

❈For more details, refer to “Advanced Vehicle Safety Management (AVSM) System” in chapter 5.

SPORT/SNOW Mode Indicator Light

■ Type A

■ Type B

■ Type A

■ Type B

This indicator light illuminates:

- When you select "SPORT/SNOW" mode as drive mode.

❈For more details, refer to "Drive mode integrated control system" in chapter 5.

ECO Indicator Light

■ Type A

■ Type B

This indicator light illuminates :

- When the Active ECO system is activated by pressing the DRIVE mode button.
- The ECO indicator (green) will illuminate to show that the Active ECO is operating.

❈For more detailed information, refer to “Drive Mode Integrated Control System" in chapter 5.

Immobilizer Indicator Light (With Smart Key)

This indicator light illuminates for up to 30 seconds:

- When the vehicle detects the smart key in the vehicle properly while the Engine Start/Stop Button is ACC or ON.
  - At this time, you can start the engine.
  - The indicator light goes off after starting the engine.

This indicator light blinks for a few seconds:

- When the smart key is not in the vehicle.
  - At this time, you can not start the engine.

This indicator light illuminates for 2 seconds and goes off:

- When the vehicle can not detect the smart key which is in the vehicle while the Engine Start/Stop Button is ON.

  In this case, have your vehicle inspected by an authorized K900 Kia dealer.

This indicator light blinks:

- When the battery of the smart key is weak.
  - At this time, you can not start the engine. However, you can start the engine if you press the Engine Start/Stop Button with the smart key. (For more details, refer to “Starting the Engine” in chapter 5).
- When there is a malfunction with the immobilizer system.

  In this case, have your vehicle inspected by an authorized K900 Kia dealer.

Turn Signal Indicator Light

This indicator light blinks:

- When you turn the turn signal light on.

If any of the following occurs, there may be a malfunction with the turn signal system. In this case, have your vehicle inspected by an authorized K900 Kia dealer.

- The indicator light does not blink but illuminates.
- The indicator light blinks more rapidly.
- The indicator light does not illuminate at all.

High Beam Indicator Light

This indicator light illuminates:

- When the headlights are on and in the high beam position.
- When the turn signal lever is pulled into the Flash-to-Pass position.

Light ON Indicator Light

This indicator light illuminates:

- When the tail lights or headlights are on.

Front Fog Indicator Light

This indicator light illuminates:

- When the front fog lights are on.

Cruise Indicator Light

This indicator light illuminates:

- When the cruise control system is enabled.

For more details, refer to “Cruise Control System” in chapter 5.

Cruise SET Indicator Light

This indicator light illuminates:

- When the cruise control speed is set.

For more details, refer to “Cruise Control System” in chapter 5.

HEAD UP DISPLAY (HUD) (IF EQUIPPED)

Description

OKH043164N

The head up display is a transparent display which projects a shadow of some information of the instrument cluster and navigation on the windshield glass.

- The head up display image on the windshield glass may be invisible when:
  - Sitting posture is bad.
  - Wearing polarized sunglasses.
  - There is an object on the dash covering the Heads Up Display.
  - Driving on a wet road.
  - A light is turned on inside the vehicle.
  - Light reflecting off the windshield in the area of the Head Up Display.

- If the head up display image is not shown well, adjust the height or illumination of the head up display in the LCD display.

❊For more details, refer to “LCD Display” in this chapter.

- When the head up display needs inspection or repair, we recommend that you consult an authorized Kia dealer.

⚠ WARNING

■ Head Up Display

- **Do not make the front windshield glass have window tint or other types of metallic coating. Otherwise, the head up display image may be invisible.**
- **Do not place any accessories on the clash pad or attach any objects on the windshield glass.**
- **As the Blind Spot Detection (BSD) system is a supplemental device that may help you drive safe, it may be dangerous to rely on only the BSD information of the head up display image when changing the lane. Always pay attention to drive safely.**

⚠ CAUTION

When replacing the front windshield glass of the vehicles equipped with the head up display, replace it with a windshield glass designed for the head up display operation. Otherwise, duplicated images may be displayed on the windshield glass.

Head Up Display ON/OFF

OKH043165N

To activate the head up display, press the HUD button.

If you press the HUD button again, the head up display will be deactivated.

Head Up Display Information

OKH043167N

1. Turn By Turn navigation information
2. Road signs
3. Speedometer
4. Cruise setting speed
5. Advanced Smart Cruise Control (ASCC) information (if equipped)
6. Lane Departure Warning System (LDWS) information (if equipped)
7. Blind Spot Detection (BSD) system information (if equipped)
8. Warning lights (Low fuel)

Head Up Display Setting

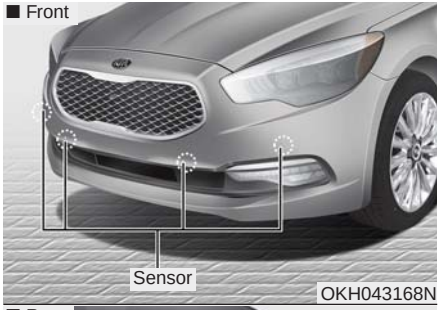
On the LCD display, you can change the head up display settings as follows.

1. Display height
2. Brightness
3. Contents selection
4. Speedometer size
5. Speedometer color

❊For more details, refer to “LCD Display” in this chapter.

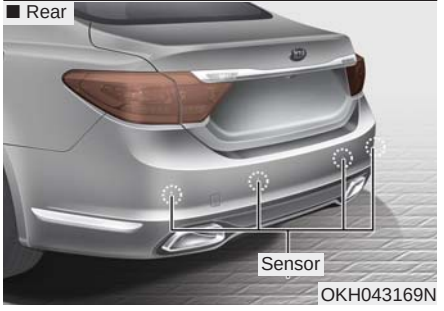
PARKING ASSIST SYSTEM

■ Front



OKH043168N

■ Rear



OKH043169N

The Parking Assist System is not a substitute for proper and safe parking and backing-up procedures. Always drive safely and use caution when parking. The Parking Assist System may not detect every object behind or in front of the vehicle.

The parking assist system assists the driver during movement of the vehicle by chiming if any object is sensed within the distance of 39 in (100 cm) in front or behind the vehicle.

This system is a supplemental system and it is not intended to nor does it replace the need for extreme care and attention of the driver.

The sensing range and objects detectable by the sensors are limited. When the vehicle moving, pay attention to your surroundings.

⚠ WARNING

The parking assist system is a supplementary function only. The operation of the parking assist system can be affected by several factors (including environmental conditions). It is the responsibility of the driver to always check the area in front of and behind the vehicle before and while moving.

Operation of the parking assist system

Operating condition

OKH043170N

- This system activates when the parking assist button is pressed with the Engine Start/Stop Button ON.
- The parking assist button turns on automatically and activates the parking assist system when you shift the gear to the R (Reverse) position.

- The sensing distance while backing up is approximately 39 in. (100 cm) when you are driving less than 6.2 mph (10 km/h).
- The sensing distance while moving forward is approximately 39 in. (100 cm) when you are driving less than 6.2 mph (10 km/h).
- When more than two objects are sensed at the same time, the closest one will be recognized first.

✻ NOTICE

The system may not detect and object if the distance from the object is already less than approximately 10 in. (25 cm) when the system is turned ON.

Types of warning sound and indicator

Distance from object		Warning indicator		Warning sound
		When driving forward	When driving rearward	
39 in. ~ 24 in. (100cm~60cm)	Front		-	Buzzer beeps intermittently
	Rear	-		Buzzer beeps intermittently
24 in. ~ 12 in. (60cm~30cm)	Front			Buzzer beeps frequently
	Rear	-		Buzzer beeps frequently
12 in. (30cm)	Front			Buzzer sounds continuously
	Rear	-		Buzzer sounds continuously

✻ NOTICE

The indicator may differ from the illustration as objects or sensors status. If the indicator blinks, the system should be checked by an authorized K900 Kia dealer.

Non-operational conditions of parking assist system

Parking assist system may not operate normally when:

1. Moisture is frozen to the sensor. (It will operate normally when moisture melts.)
2. Sensor is covered with foreign matter, such as snow or water, or the sensor cover is blocked. (It will operate normally when the material is removed or the sensor is no longer blocked.)
3. Sensor is stained with foreign matter such as snow or water. (Sensing range will return to normal when removed.)
4. The parking assist button is off.

There is a possibility of parking assist system malfunction when:

1. Driving on uneven road surfaces such as unpaved roads, gravel, bumps, or gradient.
2. Objects generating excessive noise such as vehicle horns, loud motorcycle engines, or truck air brakes can interfere with the sensor.
3. Heavy rain or water spray.
4. Wireless transmitters or mobile phones present near the sensor.
5. Sensor is covered with snow.

Detecting range may decrease when:

1. Outside air temperature is extremely hot or cold.
2. Undetectable objects smaller than 39 in (1 m) and narrower than 5.5 in (14 cm) in diameter.

The following objects may not be recognized by the sensor:

1. Sharp or slim objects such as ropes, chains or small poles.
2. Objects, which tend to absorb sensor frequency such as clothes, spongy material or snow.

✻ NOTICE

1. The warning may not sound sequentially depending on the speed and shapes of the objects detected.
2. The parking assist system may malfunction if the vehicle bumper height or sensor installation has been modified. Any non-factory installed equipment or accessories may also interfere with the sensor performance.
3. Sensor may not recognize objects less than 12 in (30 cm) from the sensor, or it may sense an incorrect distance. Use with caution.
4. When the sensor is frozen or stained with snow or water, the sensor may be inoperative until the stains are removed using a soft cloth.
5. Do not push, scratch or strike the sensor with any hard objects that could damage the surface of the sensor. Sensor damage could occur.

✻ NOTICE

This system can only sense objects within the range and location of the sensors, it can not detect objects in other areas where sensors are not installed. Also, small or slim objects, or objects located between sensors may not be detected.
Always visually check in front and behind the vehicle when driving.
Be sure to inform any drivers in the vehicle that may be unfamiliar with the system regarding the system's capabilities and limitations.

⚠ WARNING

Pay close attention when the vehicle is driven close to objects on the road, particularly pedestrians, and especially children. Be aware that some objects may not be detected by the sensors, due to the objects distance, size or material, all of which can limit the effectiveness of the sensor. Always perform a visual inspection to make sure the vehicle is clear of all obstructions before moving the vehicle in any direction.

Self-diagnosis

If you don't hear an audible warning sound or if the buzzer sounds intermittently when shifting the shift lever into the R (Reverse) position, this may indicate a malfunction in the parking assist system. If this occurs, have the system checked by an authorized K900 Kia dealer.

⚠ WARNING

Your new vehicle warranty does not cover any accidents or damage to the vehicle or injuries to its occupants related to a parking assist system. Always drive safely and cautiously.

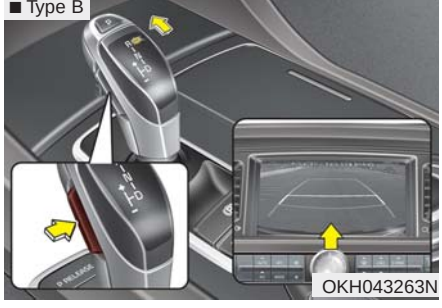
REAR CAMERA DISPLAY (IF EQUIPPED)

OKH043175N

■ Type A

OKH043174N

■ Type B


OKH043263N

The Rear-Camera Display is not a substitute for proper and safe backing-up procedures. The Rear-Camera Display may not display every object behind the vehicle. Always drive safely and use caution when backing up.

The rear camera display will activate when the back-up light is ON with the Engine Start/Stop Button ON and the shift lever in the R (Reverse) position.

This system is a supplemental system that shows behind the vehicle through the navigation display while backing-up.

Always keep the camera lens clean. If the lens is covered with foreign matter, the camera may not operate normally.

⚠ WARNING

■ Rear camera display

The rear camera display is not a safety device. It only serves to assist the driver in identifying objects directly behind the middle of the vehicle. The camera does NOT cover the complete area behind the vehicle.

⚠ WARNING

■ Relying on the Rear-Camera Display

Never rely solely on the rear camera display when backing-up.

⚠ WARNING

- **This system is a supplementary function only. It is the responsibility of the driver to always check the area behind the vehicle before and while backing up.**
- **Always keep the camera lens clean. If the lens is covered with foreign matter, the camera may not operate normally.**

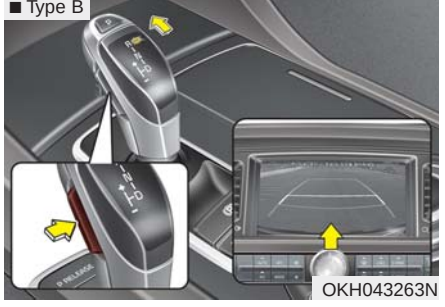
PARKING GUIDE SYSTEM (IF EQUIPPED)

OKH043175N

■ Type A

OKH043174N

■ Type B



OKH043263N

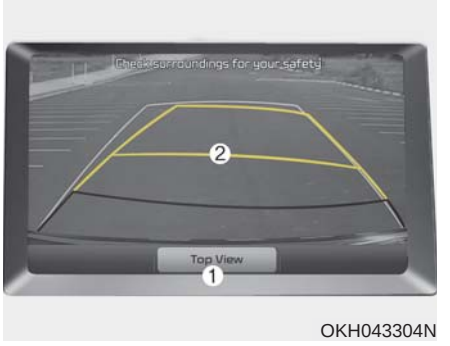
The Parking Guide System is not a substitute for proper and safe parking procedures. The Parking Guide System may not detect every object surrounding the vehicle. Always drive safely and use caution when parking.

The Parking Guide System (PGS) will activate when the back-up light is ON with the Engine Start/Stop Button ON and the shift lever in the R (Reverse) position.

⚠ WARNING

This is a supplementary system. It is the responsibility of the driver to always check the area around the vehicle when parking the vehicle.

Parking guide system (PGS) display



OKH043304N

1.Changing rear view angle (Top/Normal)

Changes the view angle of the rear camera.

2. Parking guide line

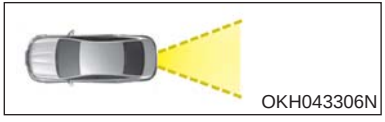
According to steering angle, the parking guide line displays to help parking.

Changing rear view angle

OKH043305N

1. Top view

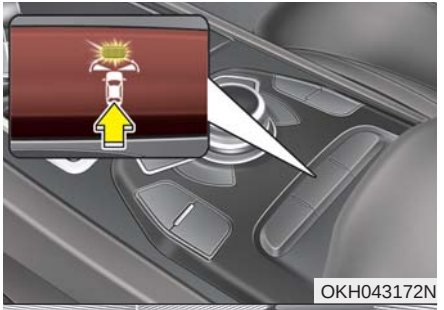
When Top View is selected, the rear view angle is displayed as if looking down from above.


OKH043306N

2. Normal view

When Normal View is selected, the rear view angle is displayed in a customary view with a normal rear view perspective.

FRONT BLIND SPOT MONITORING SYSTEM (IF EQUIPPED)


OKH043172N

OKH043173N

The Blind Spot Detection System is not a substitute for proper and safe lane changing procedures. Always drive safely and use caution when changing lanes. The Blind Spot Detection System may not detect every object alongside the vehicle.

Front blind spot monitoring system is a supplemental system that shows blind spot in front of the vehicle through the AV monitor.

The front blind spot monitoring system will operate when you press the button and shift the shift lever into N(Neutral) or D(Drive) while driving less then 6.2mph (10km/h).

⚠ WARNING

This is a supplementary system. It is the responsibility of the driver to always check the area around the vehicle before driving because there is a dead zone that can't be seen through the camera.

Always keep the camera lens clean. If the lens is covered with foreign matter, the camera may not operate normally.

✻ NOTICE

The front blind spot monitoring system may not operate normally, when you drive in the extremely high or low temperature area. (operating temperature: -4°F ~ 149°F (-20°C~65°C))

SURROUND VIEW MONITORING SYSTEM (SVM) (IF EQUIPPED)

OKH043184N

The Surround View Monitoring System (SVM) is not a substitute for proper and safe parking procedures. The Surround View Monitoring System (SVM) may not detect every object surrounding the vehicle. Always drive safely and use caution when parking.

The Surround View Monitoring System (SVM) can assist in parking by allowing the driver to see around the vehicle. Push the button into the [ON] position to operate the system. To cancel the system, push the button again.

Operating conditions

- When the Engine Start/Stop Button is ON position
- When the transaxle is on D, N or R
- When the vehicle speed is not over 12.4 mph (20km/h)

- When the vehicle speed is over 12.4mph (20km/h), the SVM system is turned off. If the vehicle speed is not over 12.4mph (20km/h) after turning off the SVM by over speed, the SVM is not turned on. To operate again, push the button.
- When the vehicle moves backwards, regardless of On/Off of button and vehicle speed, the SVM is operated.
- When the trunk and driver/passenger door are opened and the outside mirror is folded, the warning is illuminated in SVM system.
- If the SVM system is not operating normally, the system should be checked by an authorized K900 Kia dealer.

⚠ WARNING

This system is a supplementary function only. It is the responsibility of the driver to always check the area around the vehicle before and while moving.

WELCOME SYSTEM

Puddle lamp

OKH043285N

When all the doors (and trunk) are locked and closed, the puddle lamp will come on for about 15 seconds if any of the below is performed.

- When the door unlock button is pressed on the smart key.
- When the button of the outside door handle is pressed.
- When the vehicle is approached with the smart key in possession.

Also, if the outside rearview mirror folding switch is in the AUTO position, the outside rearview mirror will unfold automatically.

Headlight

When the headlight(light switch in the headlight or AUTO position) is on and all doors (and trunk) are locked and closed, the position light and headlight will come on for 15 seconds if any of the below is performed.

- When the door unlock button is pressed on the smart key.

At this time, if you press the door lock or unlock button, the position light and headlight will turn off immediately.

Interior light

When the interior light switch is in the DOOR position and all doors (and trunk) are locked and closed, the room lamp will come on for 30 seconds if any of the below is performed.

- When the door unlock button is pressed on the smart key.
- When the button of the outside door handle is pressed.

At this time, if you press the door lock or unlock button, the room lamp will turn off immediately.

Battery saver function

- The purpose of this feature is to prevent the battery from being discharged. The system automatically turns off the parking lights when the driver turns off the engine and opens the driver-side door.
- With this feature, the parking lights will be turned off automatically if the driver parks on the side of the road at night.

  If necessary, to keep the lights on when the engine is turned OFF, perform the following:

  1) Open the driver-side door.
  2) Turn the parking lights OFF and ON again using the light switch on the steering column.

Headlight escort function

If you turn the Engine Start/Stop Button to the ACC or OFF position with the headlights ON, the headlights (and/or tail lights) remain on for about 5 minutes. However, if the driver's door is opened and closed, the headlights are turned off after 15 seconds.

The headlights can be turned off by pressing the lock button on the smart key twice or turning the light switch to the OFF or Auto position.

However, if you turn the light switch to the Auto position when it is dark outside, the headlights will not be turned off.

⚠ CAUTION

If the driver gets out of the vehicle through other doors (except driver's door), the battery saver function does not operate and the headlight escort function does not turn off automatically. Therefore, It causes the battery to be discharged. In this case, make sure to turn off the lamp before getting out of the vehicle.

Daytime running light (if equipped)

Daytime Running Lights (DRL) can make it easier for others to see the front of your vehicle during the day. DRL can be helpful in many different driving conditions, and it is especially helpful after dawn and before sunset.

The DRL system turns OFF when:

1. The headlights(Front position lamp, Low beam, High beam) are ON.
2. The parking brake is applied.
3. Engine stops.
4. The front fog light is ON.
5. The light switch is in the DRL off position. (USA only)

Lighting control

■ Type A

OKH043189N

■ Type B

OKH043509N

The light switch has a Headlight and a Parking light position.

To operate the lights, turn the knob at the end of the control lever to one of the following positions:

(1) OFF or DRL OFF position
(2) Auto light position
(3) Parking light position
(4) Headlight position

Parking light position ( )

OKH043191N

When the light switch is in the parking light position, the tail and license lights will turn ON.

Headlight position ( )

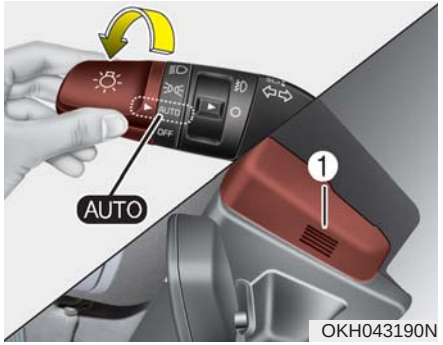
OKH043192N

When the light switch is in the headlight position, the head, tail and license lights will turn ON.

✻ NOTICE

The Engine Start/Stop Button must be in the ON position to turn on the headlights.

Auto light/AFLS position



OKH043190N

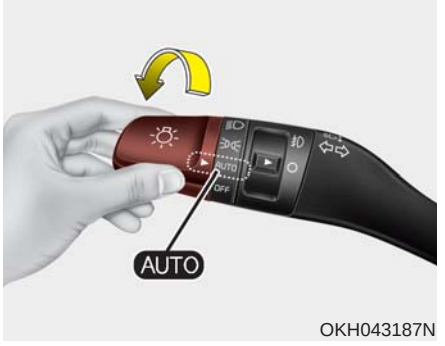
When the light switch is in the AUTO light position, the taillights and headlights will be turned ON or OFF automatically depending on the amount of light outside the vehicle.

If your vehicle is equipped with the adaptive front lighting system (AFLS), it will also operate when the headlamp is ON.

⚠ CAUTION

- **Never place anything over the sensor (1) located on the instrument panel, this will ensure better auto-light system control.**
- **Don't clean the sensor using a window cleaner, the cleaner may leave a light film which could interfere with sensor operation.**
- **If your vehicle has window tint or other types of coating on the front windshield, the Auto light system may not work properly.**

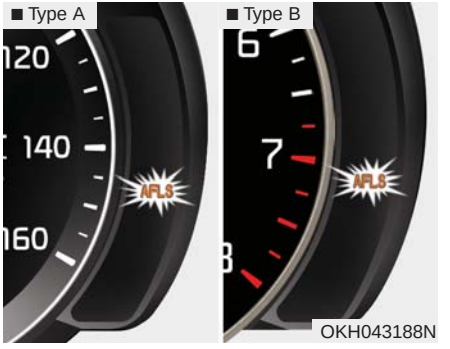
AFLS (Adaptive Front Lighting System) (if equipped)



OKH043187N

Adaptive front lighting system uses the steering angle and vehicle speed, to keep your field of vision wide by swiveling and leveling the headlamp.

Change the switch to the AUTO position when the engine is running. The adaptive front lighting system will operate when the headlamp is ON. To turn off the AFLS, change the switch to other positions. After turning the AFLS off, headlamp swiveling no longer occurs, but leveling operates continuously.



OKH043188N

If the AFLS malfunction indicator comes on, the AFLS is not working properly. Drive to the nearest safe location and restart the engine. If the indicator remains on, have the system checked by an authorized K900 Kia dealer.

High beam operation

OKH043194N

To turn on the high beam headlights, push the lever away from you. Pull it back for low beams.

The high beam indicator will illuminate when the headlight high beams are switched on.

To prevent the battery from being discharged, do not leave the lights on for a prolonged time while the engine is not running.

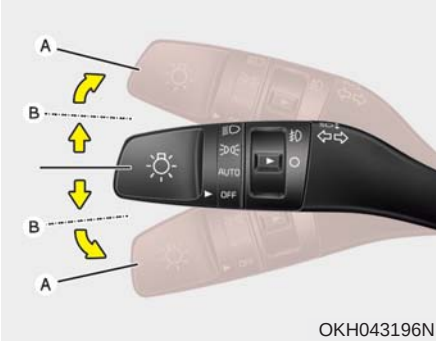
⚠ WARNING

Do not use high beam when there are other vehicles. Using high beam could obstruct the other driver's vision.

OKH043193N

To flash the headlights, pull the lever towards you. It will return to the normal (low beam) position when released. The headlight switch does not need to be on to use this flashing feature.

Turn signals and lane change signals



OKH043196N

The Engine Start/Stop Button must be ON position for the turn signals to function. To turn on the turn signals, move the lever up or down (A). The green arrow indicators on the instrument panel indicate which turn signal is operating.

They will self-cancel after a turn is completed. If the indicator continues to flash after a turn, manually return the lever to the OFF position.

To signal a lane change, move the turn signal lever slightly and hold it in position (B). The lever will return to the OFF position when released.

If an indicator stays on and does not flash or if it flashes abnormally, one of the turn signal bulbs may be burned out and will require replacement.

One-touch lane change function

To activate an one-touch lane change function, move the turn signal lever slightly and then release it. The lane change signals will blink 3, 5 or 7 times.

You can choose one-touch lane change blinking function in “One touch turn lamp” of “User setting”. Refer to “User setting” in chapter 4.

✻ NOTICE

If an indicator flash is abnormally quick or slow, a bulb may be burned out or have a poor electrical connection in the circuit.

Front fog light

OKH043197N

Fog lights are used to provide improved visibility when visibility is poor due to fog, rain or snow, etc.

1. Turn on the head light.
2. Turn the light switch (1) to the front fog light position.
3. To turn off the front fog light, turn the light switch to the front fog light position again or turn off the head light.

⚠ CAUTION

When in operation, the fog lights consume large amounts of vehicle electrical power. Only use the fog lights when visibility is poor or unnecessary battery and generator drain could occur.

Headlight leveling device (if equipped)

Automatic type

It is automatically adjusted the headlight beam level according to the number of the passengers and the loading weight in the luggage area.

And it offers the proper headlight beam under the various conditions.

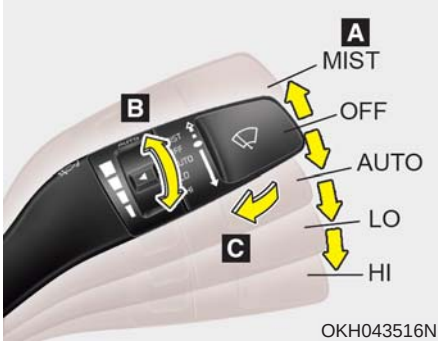
⚠ WARNING

If it is not working properly even though your car is inclined backward according to passenger's posture, or the headlight beam is irradiated to the high or low position, have your vehicle inspected by an authorized K900 Kia dealer.

Don't attempt to inspect or replace the wiring yourself to prevent malfunction.

WIPERS AND WASHERS

Windshield wiper/washer



OKH043516N

A : Wiper speed control
- MIST – Single wipe
- OFF – Off
- AUTO – AUTO control wipe
- LO – Low wiper speed
- HI – High wiper speed

B : Auto control wipe time adjustment

C : Wash with brief wipes

Windshield wipers

OKH043198N

Operates as follows when the Engine Start/Stop Button is turned ON.

MIST : For a single wiping cycle, push the lever upward and release it with the lever in the OFF position. The wipers will operate continuously if the lever is pushed upward and held.

OFF : Wiper is not in operation

AUTO : The rain sensor located on the upper end of the windshield glass senses the amount of rainfall and controls the wiping cycle for the proper interval. The more it rains, the faster the wiper operates. When the rain stops, the wiper stops. To vary the speed setting, turn the speed control knob (B).

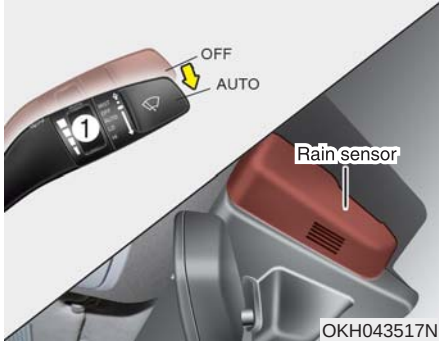
LO : Normal wiper speed

HI : Fast wiper speed

✻ NOTICE

If there is heavy accumulation of snow or ice on the windshield, defrost the windshield for about 10 minutes, or until the snow and/or ice is removed before using the windshield wipers to ensure proper operation.

Auto control (if equipped)



The rain sensor located on the upper end of the windshield glass senses the amount of rainfall and controls the wiping cycle for the proper interval.

The more it rains, the faster the wiper operates. When the rain stops, the wiper stops.

To vary the speed setting, turn the speed control knob (1).

If the wiper switch is set in AUTO mode when the Engine Start/Stop Button is ON, the wiper will operate once to perform a self-check of the system. Set the wiper to OFF position when the wiper is not in use.

⚠ CAUTION

When the Engine Start/Stop Button is ON and the windshield wiper switch is placed in the AUTO mode, use caution in the following situations to avoid any injury to the hands or other parts of the body:

- **Do not touch the upper end of the windshield glass facing the rain sensor.**
- **Do not wipe the upper end of the windshield glass with a damp or wet cloth.**
- **Do not put pressure on the windshield glass.**

⚠ CAUTION

When washing the vehicle, set the wiper switch to the OFF position so the auto wiper will not operate.

The wiper may operate and be damaged if the switch is set in the AUTO mode while washing the vehicle.

Do not remove the sensor cover located on the upper end of the passenger side windshield glass. Damage to system parts could occur and may not be covered by your vehicle warranty.

When starting the vehicle in winter, set the wiper switch in the OFF position. Otherwise, wipers may operate and ice may damage the windshield wiper blades. Always remove all snow and ice and defrost the windshield properly prior to operating the windshield wipers.

Windshield washers

OKH043199N

In the OFF position, pull the lever gently toward you to spray washer fluid on the windshield and to run the wipers 1-3 cycles.

Use this function when the windshield is dirty.

The spray and wiper operation will continue until you release the lever.

If the washer does not work, check the washer fluid level. If the fluid level is not sufficient, you will need to add appropriate non-abrasive windshield washer fluid to the washer reservoir.

The reservoir filler neck is located in the front of the engine compartment on the passenger side.

⚠ CAUTION

To prevent possible damage to the washer pump, do not operate the washer when the fluid reservoir is empty.

⚠ WARNING

Do not use the washer in freezing temperatures without first warming the windshield with the defrosters; the washer solution could freeze on contact with the windshield and obscure your vision.

⚠ CAUTION

- **To prevent possible damage to the wipers or windshield, do not operate the wipers when the windshield is dry.**
- **To prevent damage to the wiper blades, do not use gasoline, kerosene, paint thinner, or other solvents on or near them.**
- **To prevent damage to the wiper arms and other components, do not attempt to move the wipers manually.**

INTERIOR LIGHT

⚠ CAUTION

Do not use the interior lights for extended periods when the engine is not running.

It may cause battery discharge.

⚠ WARNING

Do not use the interior lights when driving in the dark. Accidents could happen because the view may be obscured by interior lights.

Automatic turn off function (if equipped)

The interior lights automatically turn off approximately 20 minutes after the engine is turned off.

If your vehicle is equipped with the theft alarm system, the interior lights automatically turns off several seconds after the system is armed.

Front lamp switch

OKH043200N

- : Press the button to turn the lamp on. This light produces a spot beam for convenient use as a map lamp at night or as a personal lamp for the driver and the front passenger. To turn the lamp off, press the button again.
- ROOM : Press the button to turn the front and rear lamp on. To turn the lamp off, press the button again.

• REAR ROOM : Press the button to turn the rear lamp on. To turn the lamp off, press the button again.

• DOOR :

Press the button to operate the door mode. The indicator on the button will illuminate and lamps will turn on or off as follows:

- The front and rear lamp comes on when a door is opened. If the door is closed, the lamps will go out in 30 seconds.
- The front and rear lamp comes on for approximately 30 seconds when doors are unlocked with the smart key as long as the doors are not opened.
- The front and rear lamp will stay on for approximately 20 minutes if a door is opened with the engine start/stop button in the ACC or OFF position.
- The front and rear lamp will stay on continuously if the door is opened with the engine start/stop button in the ON position.
- The front and rear lamp will go out immediately if the engine start/stop button is changed to the ON position or all doors are locked.

To turn off the door mode, press the button again. The indicator on the button will turn off.

• PRIVACY :

Press the button to operate the privacy mode. The indicator on the button will illuminate and lamps will turn on or off as follows:

- If you open any door, the lamp for the open door will illuminate.

To turn off the privacy mode, press the button again. The indicator on the button will turn off.

Rear lamp switch

Type A

OKH043201N

• : Press the button to turn the lamp on. This light produces a spot beam for convenient use as a map lamp at night or as a personal lamp for the driver and the front passenger. To turn the lamp off, press the button again.

• ROOM : Press the button to turn the rear lamp on. To turn the lamp off, press the button again.

OKH043307N

Type B

Press the button to turn the rear lamp on. To turn the lamp off, press the button again.

Trunk room lamp

OKH043202N

The trunk room lamp comes on when the trunk is opened.

⚠ CAUTION

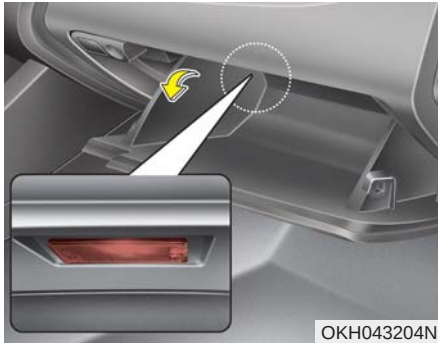
To prevent unnecessary charging system drain, close the trunk lid securely after using the trunk room.

Door courtesy lamp

OKH043203N

The door courtesy lamp comes ON when the door is opened to assist entering or exiting the vehicle. It also serves as a warning to passing vehicles that the vehicle door is open.

Glove box lamp


OKH043204N

The glove box lamp comes on when the glove box is opened.

⚠ CAUTION

To prevent unnecessary charging system drain, close the glove box securely after using the glove box.

Vanity mirror lamp

OKH043205N

Opening the lid of the vanity mirror will automatically turn on the mirror light.

⚠ CAUTION

■ Vanity mirror lamp (if equipped)

Always have the switch in the off position when the vanity mirror lamp is not in use. If the sunvisor is closed without the lamp off, it may discharge the battery or damage the sunvisor.

DEFROSTER

⚠ CAUTION

■ Conductors

To prevent damage to the conductors bonded to the inside surface of the rear window, never use sharp instruments or window cleaners containing abrasives to clean the window.

✻ NOTICE

If you want to defrost and defog the front windshield, refer to "Windshield Defrosting and Defogging" in this section.

Rear window defroster

OKH043207N

The defroster heats the window to remove frost, fog and thin ice from the rear window, while the engine is running.

To activate the rear window defroster, press the rear window defroster button located in the center facia switch panel.

The indicator on the rear window defroster button illuminates when the defroster is ON.

If there is heavy accumulation of snow on the rear window, brush it off before operating the rear defroster.

The rear window defroster automatically turns off after approximately 20 minutes or when the Engine Start/Stop Button is turned off. To turn off the defroster, press the rear window defroster button again.

Outside rearview mirror defroster (if equipped)

If your vehicle is equipped with the outside rearview mirror defrosters, they will operate at the same time you turn on the rear window defroster.

Wiper deicer (if equipped)

If your vehicle is equipped with the wiper deicer, it will be operating at the same time you turn on the rear window defroster.

AUTOMATIC CLIMATE CONTROL SYSTEM

■ Front

■ Rear

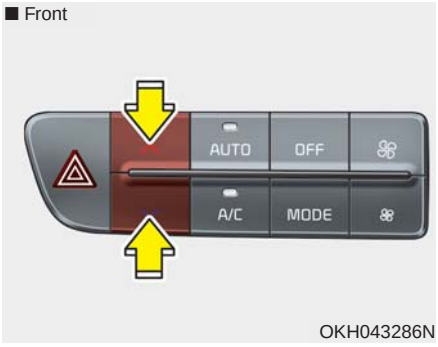
1. Driver's temperature control button
2. AUTO (automatic control) button
3. OFF button
4. Fan speed control button
5. Air conditioning button
6. Mode selection button
7. Front windshield defrost button
8. Air intake control button
9. Synchronize (Driver, passenger and rear side) temperature control button
10. Passenger's temperature control button
11. Rear window defrost button
12. Climate information screen selection button
13. Fan speed control button (Rear)
14. OFF button (Rear)
15. LCD display
16. Rear side temperature control knob
17. AUTO (automatic control) button

OKH043208N/OKH043209N

Automatic heating and air conditioning

1.Press the AUTO button.

The modes, fan speeds, air intake and air-conditioning will be controlled automatically according to the temperature setting.



2.Press the TEMP button to set the desired temperature.

✻ NOTICE

- **To turn the automatic operation off, select any of the following buttons:**
  - **Mode selection button**
  - **Air conditioning button**
  - **Front windshield defroster button**
  - **Air intake control button**
  - **Fan speed control button**

  The selected function will be controlled manually while other functions operate automatically.
- **For your convenience and to improve the effectiveness of the climate control, use the AUTO button and set the temperature to 73°F (23°C).**

OKH043211N

✻ NOTICE

Never place anything over the sensor located on the instrument panel to ensure better control of the heating and cooling system.

Manual heating and air conditioning

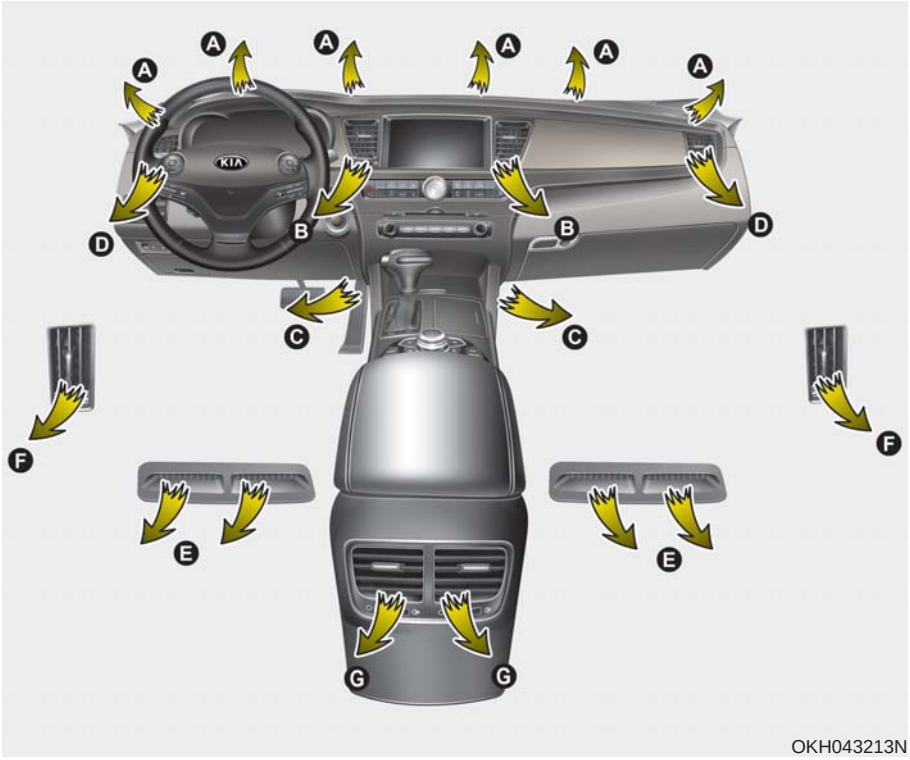
The heating and cooling system can be controlled manually by pushing buttons other than the AUTO button. In this case, the system works sequentially according to the order of buttons selected. When pressing any button except the AUTO button while using automatic operation, the functions not selected will be controlled automatically.

1. Start the engine.
2. Set the mode to the desired position.

   For improving the effectiveness of heating and cooling;

   - Heating:
   - Cooling:
3. Set the temperature control to the desired position.
4. Set the air intake control to the outside (fresh) air position.
5. Set the fan speed control to the desired speed.
6. If air conditioning is desired, turn the air conditioning system on.

Press the AUTO button in order to convert to full automatic control of the system.



OKH043213N

❋ Rear outlet vents (F)

- The air flow of the Rear outlet vents is controlled by the front climate control system and delivered through the inside air duct of the front doors. If the door is open or not closed completely, the air flow of the Rear outlet vent is not delivered properly. Make sure the front doors are closed completely.
- The air flow of the Rear outlet vents may be weaker than the instrument panel vents for the long air duct in the front doors.

Mode selection

OKH043212N

The mode selection button controls the direction of the air flow through the ventilation system.

The air flow outlet port is converted as follows:

Face-Level (B, C, D, E, F, G)

Air flow is directed toward the upper body and face. Additionally, each outlet can be controlled to direct the air discharged from the outlet.

Bi-Level (B, C, D, E, F, G)

Air flow is directed towards the face and the floor.

Floor & Defrost (A, C, D, E, F, G)

Most of the air flow is directed to the floor and the windshield with a small amount directed to the side window defrosters.

Floor-Level (A, C, D, E, F, G)

Most of the air flow is directed to the floor, with a small amount of the air being directed to the windshield and side window defrosters.

OKH043214N

Defrost-Level (A)

Most of the air flow is directed to the windshield with a small amount of air directed to the side window defrosters.

OKH043215N

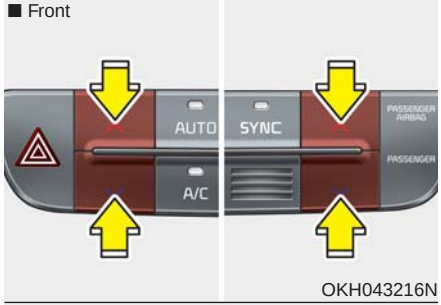
Instrument panel vents

The outlet vents can be opened or closed separately using the horizontal thumbwheel. To close the vent, rotate it left to the maximum position. To open the vent, rotate it right to the desired position.

Also, you can adjust the direction of air delivery from these vents using the vent control lever as shown.

Temperature control

■ Front



OKH043216N

■ Rear

OKH043217N

The temperature will increase to the maximum (HI) by pushing the up (∧) button (for front) or turn the knob to the right (for rear).

The temperature will decrease to the minimum (Lo) by pushing the down (∨) button (for front) or turn the knob to the left (for rear).

When pushing the button (for front) or turning the knob (for rear), the temperature will increase or decrease by 0.5°C/1°F. When set to the lowest temperature setting, the air conditioning will operate continuously.

OKH043300N

Adjusting the driver, passenger and rear side temperature equally

1. Press the SYNC button to activate SYNC mode. The passenger and rear side temperature will be set to the same temperature as the driver side temperature.
2. Press the driver side temperature control button. The driver, passenger and rear side temperature will be adjusted equally.

Adjusting the driver, passenger and rear side temperature individually

- Press the SYNC button again to operate the driver, passenger and rear side temperature individually.
- Pressing the passenger side temperature control button will automatically cancel the SYNC mode. At this time, rear side temperature will be set to the same temperature as the driver side.
- Turning the rear temperature control knob will automatically cancel the SYNC mode. At this time, passenger side temperature will be set to the same temperature as the driver side.

Temperature conversion

You can switch the temperature mode from Centigrade to Fahrenheit as follows:

While pressing the OFF button, press the AUTO button for 3 seconds or more.

The display will change from Centigrade to Fahrenheit, or from Fahrenheit to Centigrade.

If the battery has been discharged or disconnected, the temperature mode display will reset to Fahrenheit.

Air intake control

OKH043219N

This is used to select the outside (fresh) air position or recirculated air position.

To change the air intake control position, push the control button.

Recirculated air position

With the recirculated air position selected, air from the passenger compartment will be drawn through the heating system and heated or cooled according to the function selected. When driving at high speed, the outside air may come in to circulate the air inside the vehicle.

To block the air from entering, press the air intake control button for about 2 seconds. The outside air will be blocked from coming in for 3 minutes.

Outside (fresh) air position

With the outside (fresh) air position selected, air enters the vehicle from outside and is heated or cooled according to the function selected.

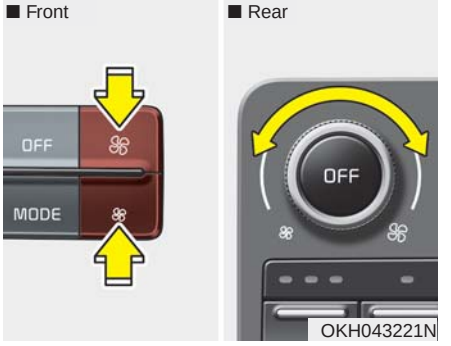
✻ NOTICE

Prolonged operation of the heater in the recirculated air position (without air conditioning selected) may cause fogging of the windshield and side windows and the air within the passenger compartment may become stale.
In addition, prolonged use of the air conditioning with the recirculated air position selected will result in excessively dry air in the passenger compartment.

⚠ WARNING

- **Continue using the climate control system operation in the recirculated air position may allow humidity to increase inside the vehicle which may fog the glass and obscure visibility.**
- **Do not sleep in a vehicle with the air conditioning or heating system on. It may cause serious harm or death due to a drop in the oxygen level and/or body temperature.**
- **Continuous use of the climate control system operation in the recirculated air position can cause drowsiness or sleepiness, and loss of vehicle control. Set the air intake control to the outside (fresh) air position as much as possible while driving.**

Fan speed control



The fan speed can be set to the desired speed by pressing the fan speed control button(for front) or turning the fan speed control knob (for rear).

To change the fan speed, press the (✤) part of the button for higher speed or press the (✤) part of the button for lower speed. (for front)

To change the fan speed, turn the knob to the right for higher speed, or left for lower speed. (for rear)

To turn the fan speed control off, press the OFF button.

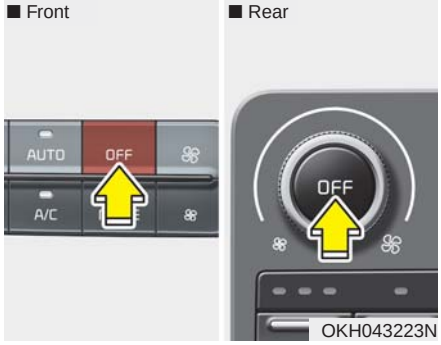
Air conditioning

OKH043222N

Press the A/C button to turn the air conditioning system on (indicator light will illuminate).

Press the button again to turn the air conditioning system off.

OFF mode



OKH043223N

- Press the front OFF button to turn off the air climate control system. However, you can still operate the mode and air intake buttons as long as the Engine Start/Stop Button is in the ON position.
- Press the rear OFF button to turn off the air coming out of the rear console vent.

Climate information screen selection (if equipped)

OKH043224N

Press the climate information screen selection button to display climate information on the screen.

Rear control lock

You can activate or deactivate the rear seat control, rear audio control and climate control by using the REAR LOCK button on the rear armrest or “System Settings” in the AVN (Audio, Video, and Navigation).

Detailed information for the “System Settings” is described in a separately supplied manual.

If the rear control button has deactivated through AVN, you can reactivate the rear control button only through AVN.

System operation

Ventilation

1. Set the mode to the position.
2. Set the air intake control to the outside (fresh) air position.
3. Set the temperature control to the desired position.
4. Set the fan speed control to the desired speed.

Heating

1. Set the mode to the position.
2. Set the air intake control to the outside (fresh) air position.
3. Set the temperature control to the desired position.
4. Set the fan speed control to the desired speed.
5. If dehumidified heating is desired, turn the air conditioning system (if equipped) on.

- If the windshield fogs up, set the mode to the or position.

Operation Tips

- To keep dust or unpleasant fumes from entering the vehicle through the ventilation system, temporarily set the air intake control to the recirculated air position. Be sure to return the control to the fresh air position when the irritation has passed to keep fresh air in the vehicle. This will help keep the driver alert and comfortable.
- Air for the heating/cooling system is drawn in through the grilles just ahead of the windshield. Care should be taken that these are not blocked by leaves, snow, ice or other obstructions.
- To prevent interior fog on the windshield, set the air intake control to the fresh air position and fan speed to the desired position, turn on the air conditioning system, and adjust the temperature control to desired temperature.

Air conditioning (if equipped)

All Kia Air Conditioning Systems are filled with R-134a refrigerant.

1. Start the engine. Press the air conditioning button.
2. Set the mode to the position.
3. Set the air intake control to the outside air or recirculated air position.
4. Adjust the fan speed control and temperature control to maintain maximum comfort.

⚠ CAUTION

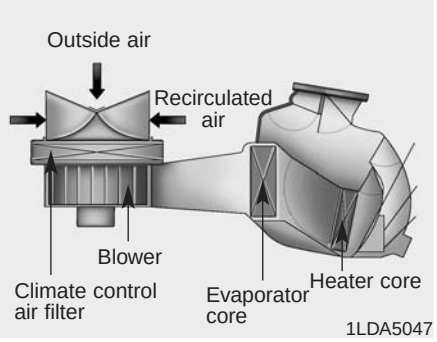
■ Excessive A/C

When using the air conditioning system, monitor the engine coolant closely while driving up hills or in heavy traffic when outside temperatures are high. Air conditioning system operation may cause engine overheating and potential engine damage. Continue to use the blower fan but turn the air conditioning system off if the engine coolant temperature gauge indicates engine overheating.

Air conditioning system operation tips

- If the vehicle has been parked in direct sunlight during hot weather, open the windows for a short time to let the hot air inside the vehicle escape.
- To help reduce moisture inside of the windows on rainy or humid days, decrease the humidity inside the vehicle by operating the air conditioning system.
- During air conditioning system operation, you may occasionally notice a slight change in engine speed as the air conditioning compressor cycles. This is a normal system operation characteristic.
- Use the air conditioning system every month only for a few minutes to ensure maximum system performance.
- When using the air conditioning system, you may notice clear water dripping (or even puddling) on the ground under the passenger side of the vehicle. This is a normal system operation characteristic.
- Operating the air conditioning system in the recirculated air position provides maximum cooling, however, continual operation in this mode may cause the air inside the vehicle to become stale.
- During cooling operation, you may occasionally notice a misty air flow because of rapid cooling and humid air intake. This is a normal system operation characteristic.

Climate control air filter (if equipped)



The climate control air filter installed behind the glove box filters the dust or other pollutants that come into the vehicle from the outside through the heating and air conditioning system. If dust or other pollutants accumulate in the filter over a period of time, the air flow from the air vents may decrease, resulting in moisture accumulation on the inside of the windshield even when the outside (fresh) air position is selected. If this happens, have the climate control air filter replaced by an authorized K900 Kia dealer.

✻ NOTICE

- **Replace the filter according to the Maintenance Schedule.**
  If the vehicle is being driven in severe conditions such as dusty or rough roads, more frequent air conditioner filter inspections and changes are required.
- **When the air flow rate suddenly decreases, the system should be checked at an authorized K900 Kia dealer.**

Checking the amount of air conditioner refrigerant and compressor lubricant

When the amount of refrigerant is low, the performance of the air conditioning is reduced. Overfilling also has a negative impact on the air conditioning system.

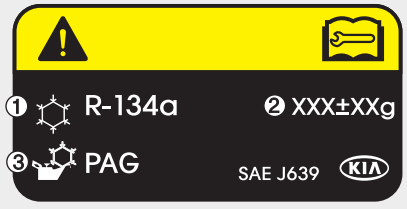
Therefore, if abnormal operation is found, have the system inspected by an authorized K900 Kia dealer.

⚠ WARNING

Because the refrigerant is at very high pressure, the air conditioning system should only be serviced by trained and certified technicians. It is important that the correct type and amount of oil and refrigerant is used, otherwise damage to the vehicle and personal injury may occur.

Air Conditioning refrigerant label

■ Example



OXM063009

❊ The actual Air Conditioning refrigerant label in the vehicle may differ from the illustration.

Each symbols and specification on air conditioning refrigerant label means as below ;

1. Classification of refrigerant
2. Amount of refrigerant
3. Classification of Compressor lubricant

Refer to chapter 8 for more detail location of air conditioning refrigerant label.

WINDSHIELD DEFROSTING AND DEFOGGING

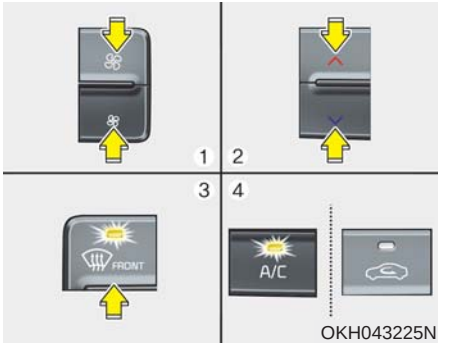
⚠ WARNING

■ Windshield heating

Do not use the or position during cooling operation in extremely humid weather. The difference between the temperature of the outside air and that of the windshield could cause the outer surface of the windshield to fog up, causing loss of visibility. In this case, set the mode selection knob or button to the position and fan speed control knob or button to the lower speed.

- For maximum defrosting, set the temperature control to the extreme right/hot position and the fan speed control to the highest speed.
- If warm air to the floor is desired while defrosting or defogging, set the mode to the floor-defrost position.
- Before driving, clear all snow and ice from the windshield, rear window, outside rear view mirrors, and all side windows.
- Clear all snow and ice from the hood and air inlet in the cowl grill to improve heater and defroster efficiency and to reduce the probability of fogging up the inside of the windshield.

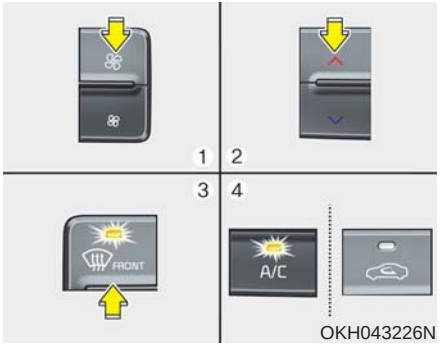
To defog inside windshield



1. Set the fan speed to the desired position.
2. Select desired temperature.
3. Press the defrost button ( ).
4. The air conditioning will be turned on according to the detected ambient temperature and outside (fresh) air position will be selected automatically.

If the air conditioning and outside (fresh) air position are not selected automatically, adjust the corresponding button manually. If the position is selected, lower fan speed is adjusted to a higher fan speed.

To defrost outside windshield

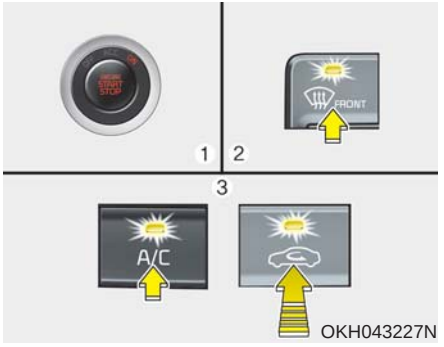


1. Set the fan speed to the highest position.
2. Set the temperature to the extreme hot (HI) position.
3. Press the defrost button ( ).
4. The air conditioning will be turned on according to the detected ambient temperature and outside (fresh) air position will be selected automatically.

If the position is selected, lower fan speed is adjusted to a higher fan speed.

Defogging logic

To reduce the probability of fogging up the inside of the windshield, the air intake or air conditioning are controlled automatically according to certain conditions such as or position. To cancel or return the defogging logic, do the following.

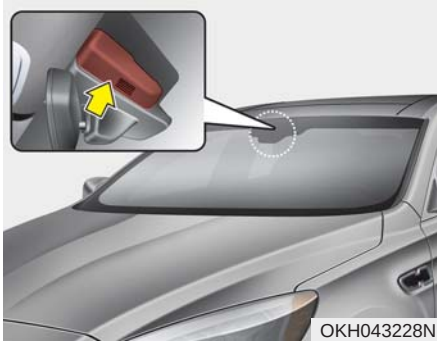


1. Turn the Engine Start/Stop Button to the ON position.
2. Press the defroster button ( ).
3. While pressing the air conditioning button (A/C), press the air intake control button at least 5 times within 3 seconds.

The indicator on the air intake button blinks 3 times with 0.5 seconds of interval. It indicates that the defogging logic is canceled or returned to the programmed status.

If the battery has been discharged or disconnected, it resets to the defog logic status.

Auto Defogging System



Auto Defogging reduces the probability of fogging up the inside of the windshield by automatically sensing the moisture of inside the windshield.

The Auto Defogging System operates when the heater or air conditioning is on.

This indicator illuminates when the Auto Defogging System senses moisture inside the windshield and the Auto Defogging System starts to operate.

If more moisture is in the vehicle, the higher steps operate as follow. For example if auto defogging does not defog inside the windshield at step 1 Outside air position, it tries to defog again at step 2 Blowing air toward the windshield.

Step 1 : Outside air position
Step 2 : Operating the air conditioning
Step 3 : Blowing air toward the windshield
Step 4 : Increasing air flow toward the windshield

If your vehicle is equipped with the auto defogging system, it is automatically activated when the conditions are met. However, if you would like to cancel the auto defogging system, press the front defroster button 4 times within 2 seconds while pressing the AUTO button. The indicator will blink 3 times to notify you that the system is cancelled. To use the auto defogging system again, follow the procedures mentioned above.

If the battery has been disconnected or discharged, it resets to the auto defogging status.

✻ NOTICE

If the A/C off or recirculated air position is manually selected while the auto defogging system is on, the auto defogging indicator will blink 3 times to give notice that manual operation is canceled.

⚠ CAUTION

Do not remove the sensor cover located on the upper end of the driver side windshield glass. Damage to the system parts could occur and may not be covered by your vehicle warranty.

STORAGE COMPARTMENTS

These compartments can be used to store small items required by the driver or passengers.

⚠ CAUTION

- **To avoid possible theft, do not leave valuables in the storage compartments.**
- **Always keep the storage compartment covers closed while driving. Do not attempt to place so many items in the storage compartment that the storage compartment cover cannot close securely.**

⚠ WARNING

■ Flammable materials

Do not store cigarette lighters, propane cylinders, or other flammable/explosive materials in the vehicle. These items may catch fire and/or explode if the vehicle is exposed to hot temperatures for extended periods.

Center console storage

OKH043231N

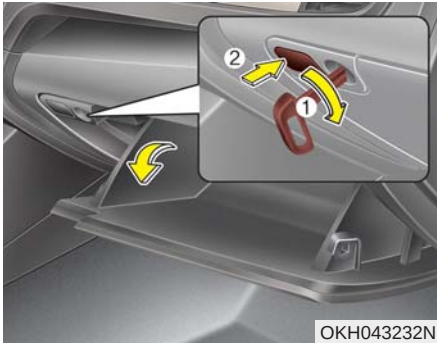
To open the center console storage, pull up the lever.

Rear seat storage

OKH043275N

To open the rear seat storage, pull up the lever.

Glove box



OKH043232N

The glove box can be locked and unlocked with the mechanical key of the smartkey (1).

To open the glove box, push the button (2) and the glove box will automatically open. Close the glove box after use.

⚠ WARNING

To help reduce the risk of injury in an accident or sudden stop, always keep the glove box door closed while driving.

⚠ WARNING

Do not keep food in the glove box for a long time.

Sunglass holder

OKH043233N

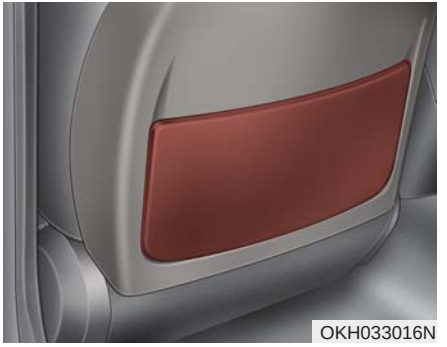
To open the sunglass holder, press the cover and the holder will slowly open. Place your sunglasses with the lenses facing out.

To close the sunglass holder push it up.

⚠ WARNING

- **Do not keep objects except sunglasses inside the sunglass holder. Such objects can be thrown from the holder in the event of a sudden stop or an accident, possibly injuring the passengers in the vehicle.**
- **Do not open the sunglass holder while the vehicle is moving. The rear view mirror of the vehicle can be blocked by an open sunglass holder.**
- **Do not put the glasses forcibly into a sunglass holder to prevent breakage or deformation of glasses. It may cause personal injury if you try to open it forcibly when the glasses are jammed in holder.**

Seatback pocket



The seatback pocket is provided on the back of the front passenger's and driver's seatbacks.

⚠ WARNING

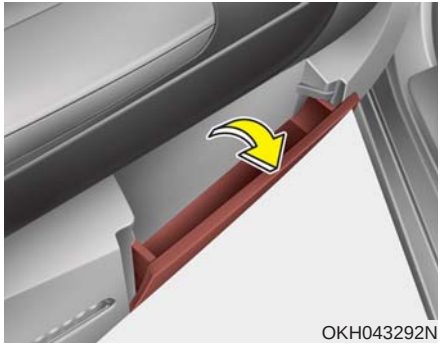
■ Seatback pocket

Do not put heavy or sharp objects in the seatback pocket. An occupant could contact such objects in a crash. Heavy objects in the front passenger seatback could also interfere with the air bag sensing system.

⚠ CAUTION

Be careful not to nip fingers when using the pocket.

Map pocket



OKH043292N

The map pocket is provided on the doors.

⚠ CAUTION

Be careful not to nip fingers when using the pocket.

INTERIOR FEATURES

Cup holder

⚠ WARNING

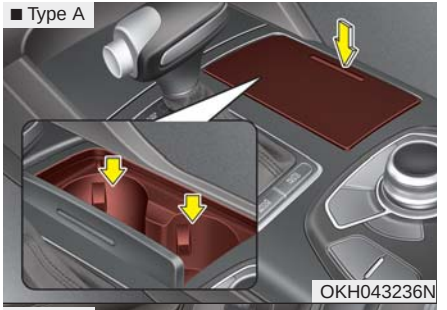
■ Hot liquids

- **Do not place uncovered cups of hot liquid in the cup holder while the vehicle is in motion. If the hot liquid spills, you could be burned. Such a burn to the driver could lead to loss of control of the vehicle.**
- **To help reduce the risk of personal injury in the event of sudden stop or collision, do not place uncovered or unsecured bottles, glasses, cans, etc., in the cup holder while the vehicle is in motion.**

⚠ WARNING

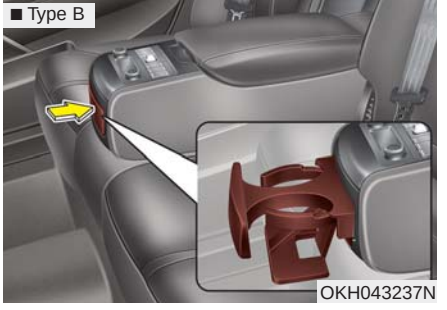
Keep cans or bottles out of direct sun light and do not put them in a vehicle that is heated up. It may explode.

■ Type A



OKH043236N

■ Type B



OKH043237N

Cups or small beverage cans may be placed in the cup holders.

Sunvisor

OKH043238N

Use the sunvisor to shield direct light through the front or side windows.

To use the sunvisor, pull it downward.

To use the sunvisor for the side window, pull it downward, unsnap it from the bracket (1) and swing it to the side (2).

To use the vanity mirror, pull down the visor and slide the mirror cover (3).

Adjust the sunvisor extension forward or backward (4).

The ticket holder (5) is provided for holding a tollgate ticket.

⚠ CAUTION

■ Vanity mirror lamp

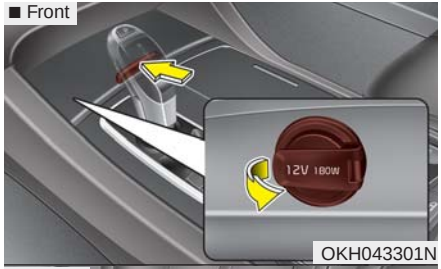
If you use the vanity mirror lamp, turn off the lamp before returning the sunvisor to its original position. It could result in battery discharge and possible sunvisor damage.

⚠ WARNING

For your safety, do not obstruct your vision when using the sunvisor.

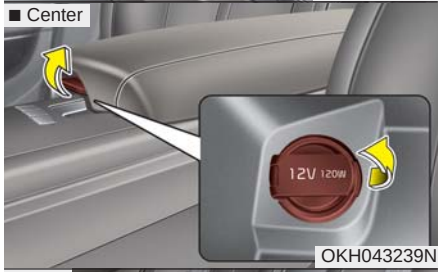
Power outlet

■ Front



OKH043301N

■ Center



OKH043239N

■ Rear

OKH043240N

The power outlets provide power for mobile telephones or other devices designed to operate with the vehicle's electrical systems. These devices should draw less than 10 amps while the engine is running.

⚠ CAUTION

- **Use the power outlet only when the engine is running and remove the accessory plug after use. Using the accessory plug for prolonged periods of time with the engine off could cause the battery to discharge.**
- **Only use 12V electric accessories which are less than 10A in electric capacity.**
- **Adjust the air-conditioner or heater to the lowest operating level when using the power outlet.**
- **Close the cover when not in use.**
- **Some electronic devices can cause electronic interference when plugged into a vehicle's power outlet. These devices may cause excessive audio static and malfunctions in other electronic systems or devices used in your vehicle.**

⚠ WARNING

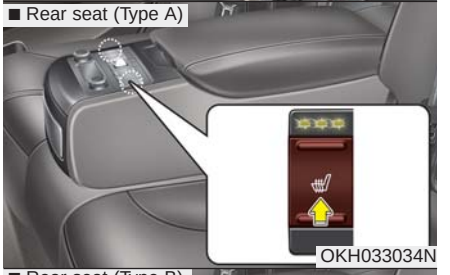
Do not put a finger or a foreign element (pin, etc.) into a power outlet and do not touch with a wet hand. You may get an electric shock.

Seat warmer

■ Front seat

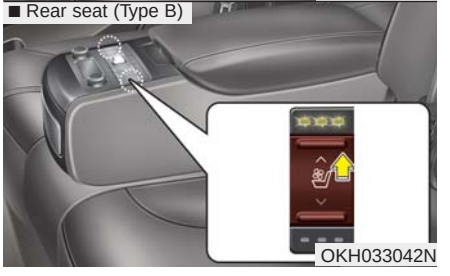
OKH033013N

■ Rear seat (Type A)



OKH033034N

■ Rear seat (Type B)



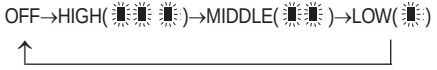
OKH033042N

The seat warmer is provided to warm the seats during cold weather. With the engine start/stop button in the ON position, push the switch to warm the seat.

During mild weather or under conditions where the operation of the seat warmer is not needed, keep the switches in the OFF position.

With the seat warmer switch in the ON position, the heating system in the seat turns off or on automatically depending on the seat temperature.

- Each time you push the button, the temperature setting of the seat is changed as follows :



- When pressing the switch for more than 1.5 seconds with the seat warmer operating, the seat warmer will turn OFF.
- The seat warmer defaults to the OFF position whenever the engine start/stop button is turned on.

- You can activate or deactivate the rear seat warmer button by using the REAR LOCK button on the rear armrest or “System Settings” in AVN (Audio, Video, and Navigation). Detailed information for “System Settings” is described in a separately supplied manual. If the REAR LOCK button activated (LED “ON”), you can not activate the rear seat warmer button.

  After deactivating (LED “OFF”) the REAR LOCK button, you can activate the rear seat warmer button.

  If the REAR LOCK button has activated through AVN, you can deactivate the REAR LOCK button only through AVN.

⚠ CAUTION

■ Seat damage

- **When cleaning the seats, do not use an organic solvent such as paint thinner, benzene, alcohol and gasoline. Doing so may damage the surface of the heater or seats.**
- **To prevent overheating the seat warmer, do not place anything on the seats that insulates against heat, such as blankets, cushions or seat covers on the seats while the seat warmer is in operation.**
- **Do not place heavy or sharp objects on the seat. Those things may damage the seat warmer system.**

⚠ WARNING

■ Seat warmer burns

Passengers should use extreme caution when using seat warmers due to the possibility of excess heating or burns. The seat warmer may cause burns even at low temperatures, especially if used for long periods of time. The occupants must be able to feel if the seat is becoming too warm and to turn the seat warmer off.

In particular, the driver must exercise extreme care for the following types of passengers:

1. **Infants, children, elderly or disabled persons, or hospital outpatients**
2. **Persons with sensitive skin or those that burn easily**
3. **Fatigued individuals**
4. **Intoxicated individuals**
5. **Individuals taking medication that can cause drowsiness or sleepiness (sleeping pills, cold tablets, etc.)**

Air ventilation seat (if equipped)

■ Front seat

OKH033014N

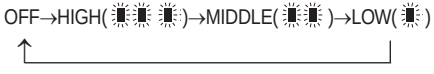
■ Rear seat

OKH033043N

The air ventilation is provided to cool the seats during hot weather by blowing air through small vent holes on the surface of the seats and seatbacks. While the engine is running, press the switch to cool the seat.

When the operation of the air ventilation is not needed, keep the switches in the OFF position.

- Each time you press the switch, the airflow will change as follows:



- When pressing the switch for more than 1.5 seconds with the seat cooler operating, the seat cooler will turn OFF.
- When the air ventilation seat is turned on, the seat may get cooler after about 5 minutes.
- Because the air ventilation uses the air in the vehicle, cooling efficiency depends on the temperature of the air. In order to improve cooling efficiency, use the air conditioning system together.
- The air ventilation seat defaults to the OFF position whenever the Engine Start/Stop Button is turned to the ON position.
- You can activate or deactivate the rear air ventilation button by using the REAR LOCK button on the rear armrest or “System Settings” in AVN (Audio, Video, and Navigation). Detailed information for “System Settings” is described in a separately supplied manual. If the REAR LOCK button activated (LED “ON”), you can not activate the rear air ventilation button.

  After deactivating (LED “OFF”) the REAR LOCK button, you can activate the rear air ventilation button.

  If the REAR LOCK button has activated through AVN, you can deactivate the REAR LOCK button only through AVN.

⚠ CAUTION

- **The air ventilation seat is a supplementary cooling/heating system. Use the air ventilation seat when the climate control system is on. Using the air ventilation seat for prolonged periods of time with the climate control system off could cause the air ventilation seat performance to impair.**
- **When cleaning the seats, do not use an organic solvent such as paint thinner, benzene, alcohol and gasoline. Doing so may damage the surface of the seats.**
- **Do not spill liquid such as water or beverages on the surface of the front seats and seatbacks, or the air vent holes may be blocked and prevented from working properly.**

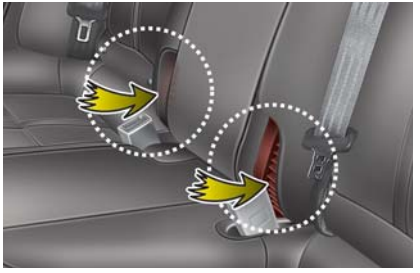
(Continued)

(Continued)

- **Do not place materials such as plastic bags or newspapers under the seats. The air vent may not work properly as the air intake can be blocked.**
- **When the air vent does not operate, restart the vehicle. If there is no change, have your vehicle inspected by an authorized K900 Kia dealer.**

⚠ CAUTION

■ Air intake



There is an air intake for the rear air ventilation at the lower part of the rear center seatback. If the air intake is blocked, efficiency of the rear air ventilation will be lower. Be careful not to block the air intake.

Clock

Whenever the battery terminals or related fuses are disconnected, you must reset the time.

OKH043241N

You can set the clock by using the AVN (Audio or Navigation)

For the details, refer to the AVN manual.

⚠ WARNING

Do not adjust the clock while driving. You may lose your steering control and cause an accident that results in severe personal injury or death.

Clothes hanger (if equipped)

OKH043511N

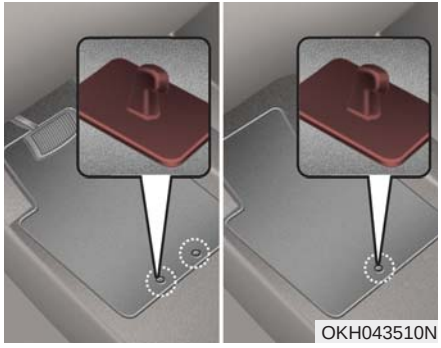
To use the hanger, pull down the upper portion of hanger.

⚠ CAUTION

■ Hanging colothing

Do not hang heavy clothes, since those may damage the hook.

Floor mat anchor(s)


OKH043510N

When using a floor mat on the floor carpet, make sure it attaches to the floor mat anchor(s) in your vehicle. This keeps the floor mat from sliding forward.

⚠ WARNING

■ After market floor mat

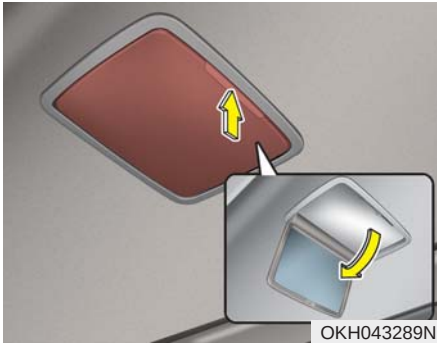
Do not install aftermarket floor mats that are not capable of being securely attached to the vehicle's floor mat anchors. Unsecured floor mats can interfere with pedal operation.

The following must be observed when installing ANY floor mat in the vehicle.

- Ensure that the floor mats are securely attached to the vehicle's floor mat anchor(s) before driving the vehicle.
- Do not use ANY floor mat that cannot be firmly attached to the vehicle's floor mat anchors.
- Do not stack floor mats on top of one another (e.g. ,all-weather rubber mat on top of a carpeted floor mat). Only a single floor mat should be installed in each position.

IMPORTANT - Your vehicle was manufactured with driver's side floor mat anchors that are designed to securely hold the floor mat in place. To avoid any interference with pedal operation, Kia recommends that only the Kia floor mat designed for use in your vehicle be installed.

Rear vanity mirror (if equipped)


OKH043289N

To use the rear vanity mirror, press the cover and it will slowly open and the mirror lamp will turn on.

⚠ CAUTION

Close the mirror cover securely. If the mirror cover is not closed, the lamp will stay on and could result in battery discharge and possible mirror damage.

Bag hanger (if equipped)

OKH043242N

Pull the strap (1) to hang a bag on the hook (2).

When you are not using the hook, fold the hook.

⚠ CAUTION

Do not hang heavy things, since those may damage the hook.

Luggage net (holder) (if equipped)

OKH043269N

To keep items from shifting in the cargo area, you can use the holders located in the cargo area to attach the luggage net.

⚠ CAUTION

To prevent damage to the goods or the vehicle, care should be taken when carrying fragile or bulky objects in the luggage compartment.

⚠ WARNING

To avoid eye injury, DO NOT overstretch the luggage net. ALWAYS keep your face and body out of the luggage net's recoil path. DO NOT use the luggage net when the strap has visible signs of wear or damage.

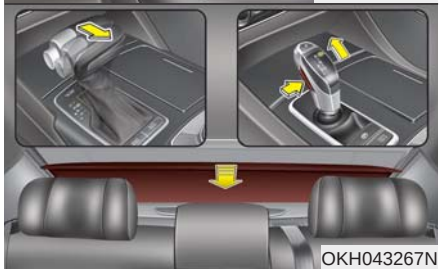
Rear curtain (if equipped)

■ Front

OKH043243N

■ Rear

OKH043244N


OKH043267N

To raise the rear curtain, depress the button. To lower the rear curtain, depress the button again.

The rear curtain will be lowered automatically when you shift the shift lever into R (Reverse) and raised automatically when you shift the shift lever from R (Reverse) into P (Park).

After the rear curtain is lowered by shifting the shift lever into R (Reverse), if you drive more than 12mph (20km/h) with the shift lever in D (Drive), the rear curtain will be raised automatically.

You can activate or deactivate the rear curtain button on the rear armrest by using the REAR LOCK button on the rear armrest or “System Settings” in AVN (Audio, Video, and Navigation).

Detailed information for “System Settings” is described in a separately supplied manual.

If the REAR LOCK button activated (LED “ON”), you can not activate the rear curtain button.

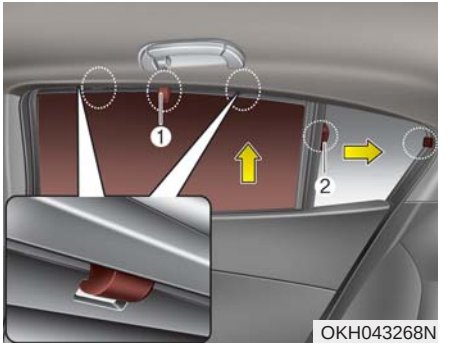
After deactivating (LED “OFF”) the REAR LOCK button, you can activate the rear curtain button.

If the REAR LOCK button has activated through AVN, you can deactivate the REAR LOCK button only through AVN.

⚠ CAUTION

Do not lower or raise the rear curtain by hand. It could cause motor failure.

Side curtain (if equipped)



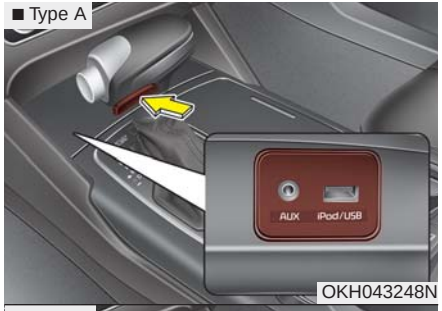
To use the side curtain:

1. Lift the curtain by the hook (1).
2. Hang the curtain on both sides of the hook.
3. Pull the curtain backward by the hook (2).
4. Hang the curtain on the hook.

MULTIMEDIA SYSTEM

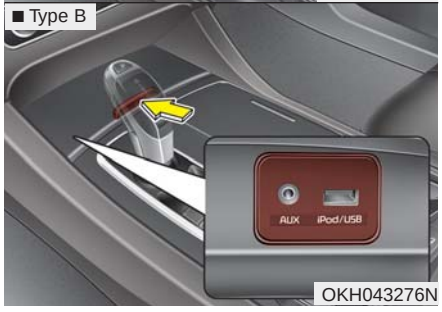
Aux, USB and iPod® port

■ Type A



OKH043248N

■ Type B



OKH043276N

If your vehicle has an aux and/or USB(universal serial bus) port or iPod® port, you can use an aux port to connect audio devices and a USB port to plug in a USB, and an iPod® port to plug in an iPod®.

✻ NOTICE

When using a portable audio device connected to the power outlet, noise may occur during playback. If this happens, use the power source of the portable audio device.

* iPod® is a Registered trademark of Apple Inc.

USB charger

OKH043302N

The USB charger is designed to recharge batteries of small size electrical devices using a USB cable. The electrical devices can be recharged when the Engine Start/Stop button is in ACC/ON/START position.

The battery charging state may be monitored on the electrical device.

Disconnect the USB cable from the USB port after use.

- Some devices are not supported for fast charging but will be charged with normal speed.
- Use the USB charger when the engine is running to prevent battery discharge.
- Only devices that fits the USB port can be used.
- The USB charger can be used only for battery charging purposes.
- Battery chargers cannot be charged.

Audio / Video / Navigation system (AVN)

OKH043270N

Detailed information for the AVN system is described in a separately supplied manual.

Driver Information System (DIS)

OKH043271N

Detailed information for the DIS system is described in a separately supplied manual.

Bluetooth® Wireless Technology hands-free

OKH043249N

OKH043303N

You can use the phone wirelessly by using the *Bluetooth*® Wireless Technology.

1. Call / Answer lever
2. Call end lever
3. Microphone

Detailed information for the *Bluetooth*® Wireless Technology hands-free is described in the manual supplied separately.

The *Bluetooth*® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Kia is under license. Other trademarks and trade names are those of their respective owners. A compatible *Bluetooth*® enabled cell phone is required to use *Bluetooth*® Wireless Technology.

Antenna

OKH043290N

When the radio power switch is turned on while the Engine Start/Stop Button is in either the “ON” or “ACC” position, your car will receive both AM and FM broadcast signals through the antenna in the rear window glass.

Shark fin antenna (if equipped)

The shark fin antenna will receive the transmit data.

⚠ CAUTION

- **Do not clean the inside of the rear window glass with a cleaner or use a scraper to remove foreign deposits as this may cause damage to the antenna elements.**
- **Avoid adding metallic coatings such as Ni, Cd, and so on. These can disturb receiving AM and FM broadcast signals.**
- **To prevent damage to the rear glass antenna, never use sharp instruments or window cleaners containing abrasives to clean the window. Clean the inside surface of the rear glass window with a piece of soft cloth.**
- **When putting a sticker on the inside surface of the rear window, be careful not to damage to the rear glass antenna.**
- **Do not put sharp instruments nearby the rear glass antenna.**
- **Tinted rear window may affect the proper functioning of the antenna.**

Steering wheel audio control

OKH043246N

The steering wheel audio control button is installed to promote safe driving.

⚠ CAUTION

Do not operate audio remote control buttons simultaneously.

VOLUME (VOL + / VOL -) (1)

- Press the up button (VOL+) to increase volume.
- Press the down button (VOL-) to decrease volume.

SEEK/PRESET (< / >) (2)

The SEEK/PRESET button has different functions based on the system mode. For the following functions the button should be pressed for 0.8 seconds or more.

RADIO mode

It will function as the AUTO SEEK select button.

CD/USB/iPod mode

It will function as the FF/REW button.

If the SEEK/PRESET button is pressed for less than 0.8 seconds, it will work as follows in each mode.

RADIO mode

It will function as the PRESET STATION buttons.

CD/USB/iPod mode

It will function as TRACK UP/DOWN button.

MODE (3)

Press the MODE button to select Radio, DISC, USB or AUX.

When the AV is OFF and the MODE button is pressed for less than 0.8 second, the AV will turn on.

When the AV is ON and the MODE button is press for more than 0.8 second, the AV will turn off.

MUTE (4)

- Move the MUTE lever up to cancel the sound.
- Move the MUTE lever up again to activate the sound.

Detailed information is described in a separately supplied manual.

Driving your vehicle

Before driving....5-4
- Before entering vehicle....5-4
- Necessary inspections....5-4
- Before starting....5-4

Engine START/STOP button....5-6
- Illuminated ENGINE START/STOP button....5-6
- ENGINE START/STOP button position....5-6

Starting the engine....5-9
- Starting the engine with a smart key....5-9

Automatic transmission (shift by cable)....5-11
- Automatic transmission operation....5-11
- Good driving practices....5-15

Automatic transmission (shift by wire)....5-16
- Automatic transmission operation....5-16
- Good driving practices....5-26

Brake system....5-27
- Power brakes....5-27
- Electric parking brake (EPB)....5-30
- AUTO HOLD....5-36
- Anti-lock brake system (ABS)....5-40
- Electronic stability control (ESC)....5-42
- Hill-start assist control (HAC)....5-46
- Good braking practices....5-46

Advanced Vehicle Safety Management (AVSM).5-48

Drive mode integrated control system....5-52
- DRIVE mode / SNOW mode....5-52

Cruise control system....5-55
- Cruise control switch....5-56
- To set cruise control speed....5-56
- To increase cruise control set speed....5-57
- To decrease the cruising speed....5-57
- To temporarily accelerate with the cruise control on....5-57
- To cancel cruise control, do one of the following..5-58
- To resume cruising speed at more than approximately 20 mph (30 km/h)....5-58
- To turn cruise control off, do one of the following..5-59

Advanced Smart Cruise Control System....5-60
- Speed setting (ASCC)....5-61
- Vehicle to vehicle distance setting (ASCC)....5-65
- To convert to cruise control mode....5-69
- Limitations of the system....5-69

Lane Departure Warning System (LDWS)....5-75
- Warning indicator....5-77
- The LDWS does not operate when....5-77

Blind Spot Detection System (BSD) 5-79
• BSD (Blind Spot Detection) / LCA (Lane Change Assist) 5-80
• RCTA (Rear cross traffic alert) 5-83
• Non-operating condition 5-85
• Pursuant to Code of Federal Regulations, Title 47, Part 15 ("FCC Rules") 5-86
Economical operation 5-87
Special driving conditions 5-89
• Hazardous driving conditions 5-89
• Rocking the vehicle 5-89
• Smooth cornering 5-90
• Driving at night 5-90
• Driving in the rain 5-91
• Driving in flooded areas 5-91
• Driving off-road 5-92
• Highway driving 5-92
Winter driving 5-93
• Snowy or Icy conditions 5-93
• Use high quality ethylene glycol coolant 5-95
• Check battery and cables 5-95
• Change to "winter weight" oil if necessary 5-96
• Check spark plugs and ignition system 5-96
• To keep locks from freezing 5-96
• Use approved window washer anti-freeze in system .5-96
• Don't let your parking brake freeze 5-96
• Don't let ice and snow accumulate underneath 5-96
• Carry emergency equipment 5-97
Trailer Towing 5-97
Vehicle load limit 5-98
• Tire and loading information label 5-98
• Certification label 5-101
Vehicle weight 5-103

Be sure the exhaust system does not leak.

The exhaust system should be checked whenever the vehicle is raised to change the oil or for any other purpose. If you

hear a change in the sound of the exhaust or if you drive over something that strikes the underneath side of the vehicle, have the exhaust system checked as soon as possible by an authorized K900 Kia dealer.

⚠ WARNING

■ Engine exhaust

Do not inhale exhaust fumes or leave your engine running in an enclosed area for a prolonged time.

Exhaust fumes contain carbon monoxide, a colorless, odorless gas that can cause unconsciousness and death by asphyxiation.

⚠ WARNING

■ Open trunk

Do not drive with the trunk open.

Poisonous exhaust gases can enter the passenger compartment. If you must drive with the trunk open proceed as follows:

1.Close all windows.

2.Open side vents.

3.Set the air intake control at "Fresh", the air flow control at "Floor" or "Face" and the fan at the highest speed.

⚠ WARNING

■ California proposition 65

Engine exhaust and a wide variety of automobile components and parts, including components found in the interior furnishings in a vehicle, contain or emit chemicals known to the State of California to cause cancer and birth defects and reproductive harm. In addition, certain fluids contained in vehicles and certain products of component wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

BEFORE DRIVING

Before entering vehicle

- Be sure that all windows, outside mirror(s), and outside lights are clean.
- Check the condition of the tires.
- Check under the vehicle for any sign of leaks.
- Be sure there are no obstacles behind you if you intend to back up.

Necessary inspections

Fluid levels, such as engine oil, engine coolant, brake fluid, and washer fluid should be checked on a regular basis, with the exact interval depending on the fluid. Further details are provided in Section 7, “Maintenance”.

⚠ WARNING

■ Distracted driving

Focus on the road while driving.

The driver's primary responsibility is in the safe and legal operation of the vehicle. Use of any hand held devices, other equipment or vehicle systems that distract the driver should not be used during vehicle operation.

Before starting

- Close and lock all doors.
- Position the seat so that all controls are easily reached.
- Buckle your seat belt.
- Adjust the inside and outside rearview mirrors.
- Be sure that all lights work.
- Check all gauges.
- Check the operation of warning lights when the ignition switch is turned to the ON position.
- Release the parking brake and make sure the brake warning light goes off.

For safe operation, be sure you are familiar with your vehicle and its equipment.

⚠ WARNING

■ Check surrounding

Always check the surrounding areas near your vehicle for people, especially children, before putting a vehicle into D (Drive) or R (Reverse).

⚠ WARNING

■ Driving while intoxicated

Do not drive while intoxicated. Drinking and driving is dangerous. Even a small amount of alcohol will affect your reflexes, perceptions and judgment. Driving while under the influence of drugs is as dangerous as or more dangerous than driving drunk.

⚠ WARNING

■ Loose object

Securely store items in your vehicle. When you make a sudden stop or turn the steering wheel rapidly, loose objects may drop on the floor and it could interfere with the operation of the foot pedals, possibly causing an accident.

⚠ WARNING

■ Fire risk

When you intend to park or stop the vehicle with the engine on, be careful not to depress the accelerator pedal for a long period of time. It may overheat the engine or exhaust system and cause a fire.

ENGINE START/STOP BUTTON

Illuminated ENGINE START/STOP button

OKH053001N

Whenever the front door is opened, the ENGINE START/STOP button will illuminate for your convenience. The light will go off after about 30 seconds after the door is closed.

ENGINE START/STOP button position

OFF

White

To turn off the engine (START/STOP position) or vehicle power (ON position), press the ENGINE START/STOP button with the shift lever in the P (Park) position. When you press the ENGINE START/STOP button without the shift lever in the P (Park) position, the ENGINE START/STOP button will not change to the OFF position but to the ACC position.

In an emergency situation while the vehicle is in motion, you are able to turn the engine off and to the ACC position by pressing the ENGINE START/STOP button for more than 2 seconds or 3 times successively within 3 seconds. If the vehicle is still moving, you can restart the engine without depressing the brake pedal by pressing the ENGINE START/STOP button with the shift lever in the N (Neutral) position.

ACC(Accessory)

Orange

Press the ENGINE START/STOP button while it is in the OFF position without depressing the brake pedal.

The steering wheel unlocks and electrical accessories are operational.

If the ENGINE START/STOP button is in the ACC position for more than 1 hour, the button is turned off automatically to prevent battery discharge.

ON

Red

Press the ENGINE START/STOP button while it is in the ACC position without depressing the brake pedal.

The warning lights can be checked before the engine is started. Do not leave the ENGINE START/STOP button in the ON position for a long time. The battery may discharge, because the engine is not running.

START/RUN

Not illuminated

To start the engine, depress the brake pedal and press the ENGINE START/STOP button with the shift lever in the P (Park) or the N (Neutral) position. For your safety, start the engine with the shift lever in the P (Park) position.

If you press the ENGINE START/STOP button without depressing the brake pedal, the engine will not start and the button will change as follows:

OFF ➔ ACC ➔ ON ➔ OFF

If you leave the ENGINE START/STOP button in the ACC or ON position for a long time, the battery will discharge.

⚠ WARNING

■ Starting vehicle

Never press the ENGINE START/STOP button while the vehicle is in motion. This would result in loss of directional control and braking function, which could cause an accident.

STARTING THE ENGINE

⚠ WARNING

■ Proper footwear

Always wear appropriate shoes when operating your vehicle. Unsuitable shoes (high heels, ski boots, sandals, etc.) may interfere with your ability to use the brake and accelerator pedals.

Starting the engine with a smart key

1. Carry the smart key or leave it inside the vehicle.
2. Make sure the parking brake is firmly applied
3. Place the transaxle shift lever in P (Park).
4. Press the ENGINE START/STOP button while depressing the brake pedal.
5. In extremely cold weather (below 0°F / -18°C) or after the vehicle has not been operated for several days, let the engine warm up without depressing the accelerator.

Whether the engine is cold or warm, it should be started without depressing the accelerator.

- Even if the smart key is in the vehicle, but is far away from you, the engine may not start.
- When the ENGINE START/STOP button is in the ACC position or above, if any door is opened, the system checks for the smart key. If the smart key is not in the vehicle,the " " indicator will blink or the warning "Key not in vehicle" will illuminate on the LCD display. And if all doors are closed, the chime will sound for 5 seconds. The indicator or warning will turn off while the vehicle is moving. Always have the smart key with you.

The engine will start only when the smart key is in the vehicle.

⚠ WARNING

■ Unintended vehicle movement

Never leave the smart key in the vehicle with children or vehicle occupants who are unfamiliar with the vehicle operation. Pushing the ENGINE START/STOP button while the smart key is in the vehicle may result in unintended engine activation and/or unintended vehicle movement.

OKH053003

- If the battery is weak or the smart key does not work correctly, you can start the engine by pressing the engine start/stop button with the smart key.

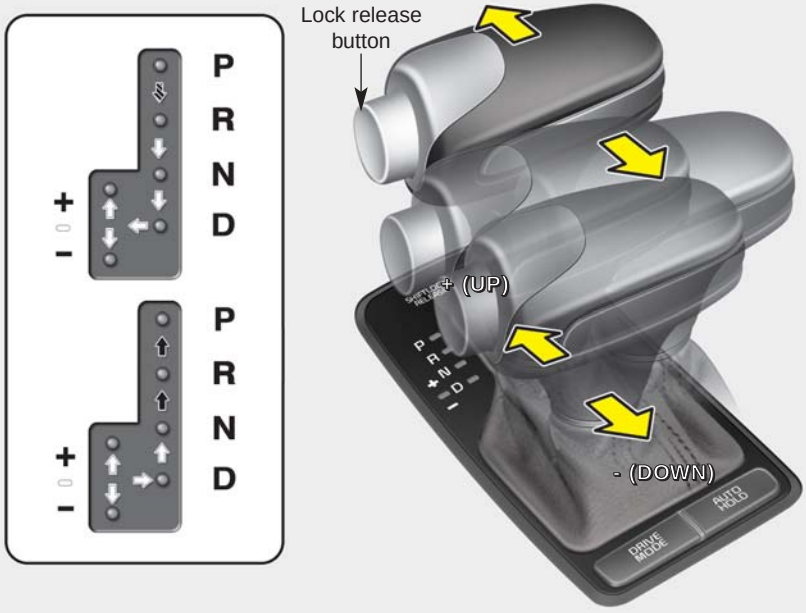
  The side with the lock button should contact the engine start/stop button directly.

  When you press the engine start/stop button directly with the smart key, the smart key should contact the button at a right angle.

- When the stop lamp fuse is blown, you can't start the engine normally. Replace the fuse with a new one. If it is not possible, you can start the engine by pressing the ENGINE START/STOP button for 10 seconds while it is in the ACC position. The engine can start without depressing the brake pedal. But for your safety always depress the brake pedal before starting the engine.

Do not press the ENGINE START/STOP button for more than 10 seconds except when the stop lamp fuse is blown.

AUTOMATIC TRANSMISSION (SHIFT BY CABLE)



To shift, depress the brake pedal and press the button.

Press the button when shifting.

The shift lever can be shifted freely.

OKH053007N

Automatic transmission operation

The automatic transmission has 8 forward speeds and one reverse speed. The individual speeds are selected automatically, depending on the position of the shift lever.

✻ NOTICE

The first few shifts on a new vehicle or if the battery has been disconnected, may be somewhat abrupt. This is a normal condition, and the shifting sequence will adjust after shifts are cycled a few times by the TCM (Transaxle Control Module) or PCM (Powertrain Control Module).

For smooth operation, depress the brake pedal when shifting from N (Neutral) to a forward or reverse gear.

⚠ CAUTION

■ Transmission

To avoid damage to your transmission, do not accelerate the engine in R (Reverse) or any forward gear position with the brakes on. The transmission may be damaged if you shift into P (Park) while the vehicle is in motion.

When stopped on an incline, do not hold the vehicle with engine power. Use the service brake or the parking brake.

Transmission ranges

The indicator in the instrument cluster displays the shift lever position when the Engine Start/Stop Button is in the ON position.

P (Park)

Always come to a complete stop before shifting into P (Park). This position locks the transmission and prevents the drive wheels from rotating.

Shifting into P (Park) while the vehicle is in motion will cause the drive wheels to lock which will cause you to lose control of the vehicle.

R (Reverse)

Use this position to drive the vehicle backward.

⚠ CAUTION

Always come to a complete stop before shifting into or out of R (Reverse); you may damage the transmission if you shift into R (Reverse) while the vehicle is in motion, except as explained in "Rocking the vehicle" in this section.

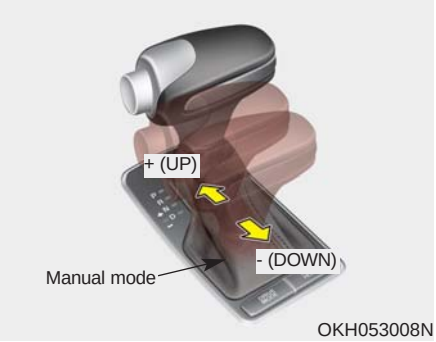
N (Neutral)

The wheels and transmission are not engaged. The vehicle will roll freely even on the slightest incline unless the parking brake or service brakes are applied.

D (Drive)

This is the normal forward driving position. The transmission will automatically shift through a 8-gear sequence, providing the best fuel economy and power.

For extra power when passing another vehicle or climbing grades, depress the accelerator fully, at which time the transmission will automatically downshift to the next lower gear.



OKH053008N

Manual mode

Whether the vehicle is stationary or in motion, sports mode is selected by pushing the shift lever from the D (Drive) position into the manual gate. To return to D (Drive) range operation, push the shift lever back into the main gate.

In manual mode, moving the shift lever backwards and forwards will allow you to make gearshifts rapidly.

Up (+) : Push the lever forward once to shift up one gear.

Down (-) : Pull the lever backwards once to shift down one gear.

✻ NOTICE

- **In manual mode, the driver must execute upshifts in accordance with road conditions, taking care to keep the engine speed below the red zone.**
- **In manual mode, only the 8 forward gears can be selected. To reverse or park the vehicle, move the shift lever to the R (Reverse) or P (Park) position as required.**
- **In manual mode, downshifts are made automatically when the vehicle slows down. When the vehicle stops, 1st gear is automatically selected.**
- **In manual mode, when the engine rpm approaches the red zone shift points are varied to upshift automatically.**
- **To maintain the required levels of vehicle performance and safety, the system may not execute certain gearshifts when the shift lever is operated.**

(Continued)

(Continued)

- **When driving on a slippery road, push the shift lever forward into the +(up) position. This causes the transmission to shift into the 2nd gear which is better for smooth driving on a slippery road. Push the shift lever to the -(down) side to shift back to the 1st gear.**

Shift lock system

For your safety, the automatic transmission has a shift lock system which prevents shifting the transmission from P (Park) into R (Reverse) unless the brake pedal is depressed.

To shift the transmission from P (Park) into R (Reverse):

1. Depress and hold the brake pedal.
2. Start the engine or set the Engine Start/Stop Button to the ON position.
3. Move the shift lever.

If the brake pedal is repeatedly depressed and released with the shift lever in the P (Park) position, a chattering noise near the shift lever may be heard. This is a normal condition.

⚠ WARNING

■ Shifting from park

Always fully depress the brake pedal before and while shifting out of the P (Park) position into another position to help avoid inadvertent motion of the vehicle.

Shift-lock override

If the shift lever cannot be moved from the P (Park) or N (Neutral) position into the R (Reverse) position with the brake pedal depressed, continue depressing the brake, then do the following:

1. Carefully remove the cap (1) covering the shift-lock access hole.
2. Insert a screwdriver into the access hole and press down on the screwdriver.
3. Move the shift lever.
4. Have your vehicle inspected by an authorized K900 Kia dealer immediately.

Good driving practices

- Never move the shift lever from P (Park) or N (Neutral) to any other position with the accelerator pedal depressed.
- Never move the shift lever into P (Park) when the vehicle is in motion.
- Slow down before shifting to a lower gear. Otherwise, the lower gear may not be engaged.
- Always use the parking brake. Do not depend on placing the transaxle in P (Park) to keep the vehicle from moving.
- Optimum vehicle performance and economy is obtained by smoothly depressing and releasing the accelerator pedal.

Moving up a steep grade from a standing start

To move up a steep grade from a standing start, depress the brake pedal, shift the shift lever to D (Drive). Select the appropriate gear depending on load weight and steepness of the grade, and release the parking brake. Depress the accelerator gradually while releasing the service brakes.

AUTOMATIC TRANSMISSION (SHIFT BY WIRE)

❈ When you shift the transmission, depress the brake pedal with pressing [UNLOCK] button.

OKH053010N

Automatic transmission operation

The automatic transmission has 8 forward speeds and one reverse speed. The individual speeds are selected automatically, depending on the position of the shift lever.

✻ NOTICE

The first few shifts on a new vehicle, if the battery has been disconnected, may be somewhat abrupt. This is a normal condition, and the shifting sequence will adjust after shifts are cycled a few times by the TCM (Transmission Control Module) or PCM (Powertrain Control Module).

For smooth operation, depress the brake pedal when shifting from N (Neutral) to a forward or reverse gear.

⚠ CAUTION

■ Transmission

To avoid damage to your transmission, do not accelerate the engine in R (Reverse) or any forward gear position with the brakes on. The transmission may be damaged if you shift into P (Park) while the vehicle is in motion.

When stopped on an incline, do not hold the vehicle with engine power. Use the service brake or the parking brake.

Transmission ranges

The indicator in the instrument cluster and shift lever displays the shift lever position when the Engine Start/Stop Button is in the OFF/ACC/ON position.

OKH053011N

P (Park)

Always come to a complete stop before shifting into P (Park). This position locks the transmission and prevents the drive wheels from rotating.

To shift the gear from [R], [N], [D] or [M] to [P], press the [P] button on the shift lever.

If you turn off the engine in [D], [R] or [M], the shifting automatically changes to [P].

If you press the [P] button when the shifting is on [M] or if you turn the engine off when the shifting is on [M], the shift lever is automatically moved to right side and the shifting is changed to [P].

When the shift lever is automatically moved to right side, if you hold the shift lever by force, the warning message will be illuminated in cluster. Move the shift lever to right side manually.

When you park the vehicle, press the [P] button of shift lever with applying brake pedal and apply the parking brake.

Shifting into P (Park) while the vehicle is in motion will cause the drive wheels to lock which will cause you to lose control of the vehicle.

OKH053013N

OKH053014N

R (Reverse)

Use this position to drive the vehicle backward.

To shift the gear to [R] press the [UNLOCK] button of shift lever with depressing brake pedal and move the shift lever forward.

⚠ CAUTION

Always come to a complete stop before shifting into or out of R (Reverse); you may damage the transmission if you shift into R (Reverse) while the vehicle is in motion, except as explained in “Rocking the vehicle” in this section.

N (Neutral)

The wheels and transmission are not engaged. The vehicle will roll freely even on the slightest incline unless the parking brake or service brakes are applied.

In neutral range if you turn off the engine, the range will be on [N] and the engine start/stop button position will be on ACC.

To turn off engine :

1. Press the engine start/stop button again to the ON position.
2. Press the [P] button on the shift lever.
3. Press the engine start/stop button again, the engine start/stop button will change to the OFF position.

However, when you open the door with the shift lever in N (Neutral) and the engine start/stop button in the ACC position, the shift lever will automatically move to P (Park) and the engine start/stop button will change to the OFF position.

D (Drive)

This is the normal forward driving position. The transmission will automatically shift through a 8-gear sequence, providing the best fuel economy and power.

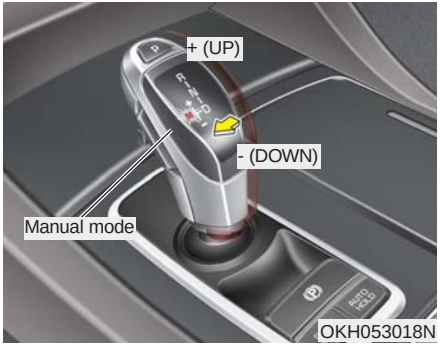
For extra power when passing another vehicle or climbing grades, depress the accelerator fully, at which time the transmission will automatically downshift to the next lower gear.

To shift into [D], depress the brake pedal and press the [UNLOCK] button of shift lever. And then move the shift lever to backward.

To shift into [D], from [N] you must depress the brake pedal.

✻ NOTICE

Always come to a complete stop before shifting into D (Drive).



Manual mode

Whether the vehicle is stationary or in motion, manual mode is selected by pushing the shift lever from the D (Drive) position into the manual gate. To return to D (Drive) range operation, push the shift lever back into the main gate.

In manual mode, moving the shift lever backwards and forwards will allow you to make gearshifts rapidly.

Up (+) : Push the lever forward once to shift up one gear.

Down (-) : Pull the lever backwards once to shift down one gear.

✻ NOTICE

- **In manual mode, the driver must execute upshifts in accordance with road conditions, taking care to keep the engine speed below the red zone.**
- **In manual mode, only the 8 forward gears can be selected. To reverse or park the vehicle, move the shift lever to the R (Reverse) or P (Park) position as required.**
- **In manual mode, downshifts are made automatically when the vehicle slows down. When the vehicle stops, 1st gear is automatically selected.**
- **In manual mode, when the engine rpm approaches the red zone shift points are varied to upshift automatically.**
- **To maintain the required levels of vehicle performance and safety, the system may not execute certain gearshifts when the shift lever is operated.**

(Continued)

(Continued)

- **When driving on a slippery road, push the shift lever forward into the +(up) position. This causes the transmission to shift into the 2nd gear which is better for smooth driving on a slippery road. Push the shift lever to the -(down) side to shift back to the 1st gear.**

Shift lock system (if equipped)

For your safety, the automatic transmission has a shift lock system which prevents shifting the transmission from P (Park) into R (Reverse) unless the brake pedal is depressed.

To shift the transmission from P (Park) into R (Reverse) or D (Drive) :

1. Depress and hold the brake pedal.
2. Start the engine or turn the Engine Start / Stop Button to the ON position.
3. Move the shift lever to R (Reverse) or D (Drive) with pressing [UNLOCK] button.

If the brake pedal is repeatedly depressed and released with the shift lever in the P (Park) position, a chattering noise near the shift lever may be heard. This is a normal condition.

⚠ WARNING

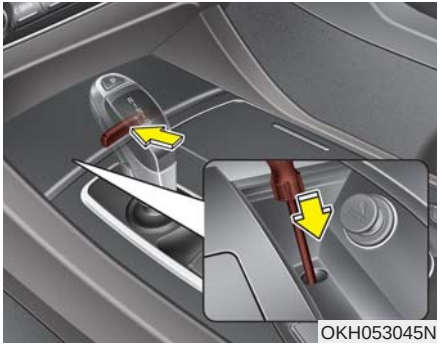
■ Shifting from park

Always fully depress the brake pedal before and while shifting out of the P (Park) position into another position to help avoid inadvertent motion of the vehicle.

■ ***When the battery is discharged:***

When the battery is discharged, the automatic transmission (shift by wire) is not shifted.

In emergency, if you want to shift into [N], follow actions


OKH053045N

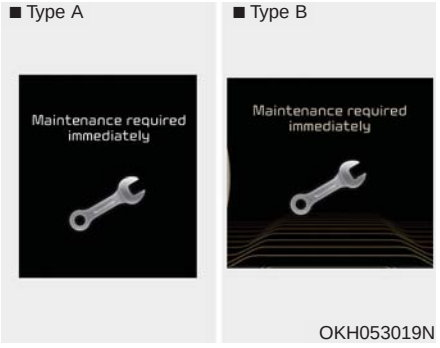
You can shift into [N] by using the driver if the jump starting is impossible to do.

1) Open the storage cover.
2) Remove the rubber on bottom of storage box.
3) Insert the driver (-) to service hole as direction of clockwise 10 times. The shifting is changed to [N] from [P] position. If you want to shift to [P] position, turn the driver counter-clockwise.

⚠ CAUTION

If the electric parking brake is not released, we recommend that the vehicle is towed as flat-bed towing.

■ Type A ■ Type B



OKH053019N

1. If the transmission is not operated as normal, the warning will be illuminated. Have your vehicle inspected by an authorized K900 Kia dealer.

■ Type A ■ Type B

OKH053020N

2. If the shift lever has some problem with main system, the warning will be illuminated. Have your vehicle inspected by an authorized K900 Kia dealer.

■ Type A

■ Type B

OKH053021N

3. If the shifting condition is not matched by high engine RPM or high vehicle speed, the warning will be illuminated. When you reduce the engine RPM or vehicle speed, the shifting will be operated.

■ Type A

■ Type B

OKH053022N

4. When you shift the transmission, if you do not depress the brake pedal, the warning will be illuminated.

■ Type A

■ Type B

OKH053023N

5. When you shift into [P], if the vehicle speed is high, warning will be illuminated. Stop the vehicle at safe area and shift into [P].

■ Type A

■ Type B

OKH053024N

6.When the transmission is fixed on [M], the warning will be illuminated.

■ Type A

■ Type B

OKH053025N

7.While stopping in [D], [R] and [M], when you get off the vehicle, the warning will be illuminated for your safety and the shifting is automatically changed to [P].

■ Type A

■ Type B

OKH053102N

If you do not press [UNLOCK] button, the warning will be illuminated.

Good driving practices

- Never move the shift lever from P (Park) or N (Neutral) to any other position with the accelerator pedal depressed.
- Never move the shift lever into P (Park) when the vehicle is in motion.
- Be sure the car is completely stopped before you attempt to shift into R (Reverse) or D (Drive).
- Do not "ride" the brakes. This can cause them to overheat and malfunction. Instead, when you are driving down a long hill, slow down and shift to a lower gear. When you do this, engine braking will help slow the car.
- Slow down before shifting to a lower gear. Otherwise, the lower gear may not be engaged.
- Always use the parking brake. Do not depend on placing the transmission in P (Park) to keep the car from moving.
- Optimum vehicle performance and economy is obtained by smoothly depressing and releasing the accelerator pedal.

Moving up a steep grade from a standing start

To move up a steep grade from a standing start, depress the brake pedal, shift the shift lever to D (Drive) or [1st] gear of [M] mode. Select the appropriate gear depending on load weight and steepness of the grade, and release the parking brake. Depress the accelerator gradually while releasing the service brakes.

BRAKE SYSTEM

Power brakes

Your vehicle has power-assisted brakes that adjust automatically through normal usage.

In the event that the power-assisted brakes lose power because of a stalled engine or some other reason, you can still stop your vehicle by applying greater force to the brake pedal than you normally would. The stopping distance, however, will be longer.

When the engine is not running, the reserve brake power is partially depleted each time the brake pedal is applied. Do not pump the brake pedal when the power assist has been interrupted.

Pump the brake pedal only when necessary to maintain steering control on slippery surfaces.

⚠ CAUTION

■ Brake pedal

Do not drive with your foot resting on the brake pedal. This will create abnormally high brake temperatures which can cause excessive brake lining and pad wear.

⚠ WARNING

■ Steep hill braking

Avoid continuous application of the brakes when descending a long or steep hill by shifting to a lower gear. Continuous brake application will cause the brakes to overheat and could result in a temporary loss of braking performance.

Wet brakes may impair the vehicle's ability to safely slow down; the vehicle may also pull to one side when the brakes are applied. Applying the brakes lightly will indicate whether they have been affected in this way.

To dry the brakes, apply them lightly while maintaining a safe forward speed until brake performance returns to normal.

Always, confirm the position of the brake and accelerator pedal before driving. If you don't check the position of the accelerator and brake pedal before driving, you may depress the accelerator instead of the brake pedal. It may cause a serious accident.

In the event of brake failure

If service brakes fail to operate while the vehicle is in motion, you can make an emergency stop with the parking brake. The stopping distance, however, will be much greater than normal.

⚠ WARNING

■ Parking brake

Avoid applying the parking brake to stop the vehicle while it is moving except in an emergency situation. Applying the parking brake while the vehicle is moving at normal speeds can cause a sudden loss of control of the vehicle. If you must use the parking brake to stop the vehicle, use great caution in applying the brake.

Disc brakes wear indicator

When your brake pads are worn and new pads are required, you will hear a high-pitched warning sound from your front brakes or rear brakes (if equipped). You may hear this sound come and go or it may occur whenever you depress the brake pedal.

Please remember that some driving conditions or climates may cause a brake squeal when you first apply (or lightly apply) the brakes. This is normal and does not indicate a problem with your brakes.

Always replace the front or rear brake pads as pairs.

⚠ CAUTION

■ Replace brake pads

Do not continue to drive with worn brake pads. Continuing to drive with worn brake pads can damage the braking system and result in costly brake repairs.

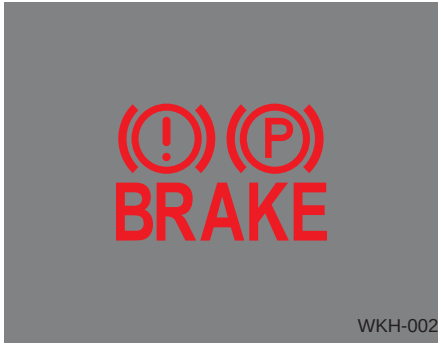
⚠ WARNING

■ Brake wear

Do not ignore high pitched wear sounds from your brakes. If you ignore this audible warning, you will eventually lose braking performance, which could lead to a serious accident.

⚠ WARNING

- **To prevent unintentional movement when stopped and leaving the vehicle, do not use the gearshift lever in place of the parking brake. Set the parking brake AND make sure the gearshift lever is securely positioned in P (Park) for automatic transmission equipped vehicles.**
- **Never allow anyone who is unfamiliar with the vehicle to touch the parking brake. If the parking brake is released unintentionally, serious injury may occur.**
- **All vehicles should always have the parking brake fully engaged when parking to avoid inadvertent movement of the vehicle which can injure occupants or pedestrians.**



WKH-002

Check the brake warning light by turning the ignition switch ON (do not start the engine). This light will be illuminated when the parking brake is applied with the ignition switch in the START or ON position.

Before driving, be sure the parking brake is fully released and the brake warning light is off.

If the brake warning light remains on after the parking brake is released while engine is running, there may be a malfunction in the brake system. Immediate attention is necessary.

If at all possible, cease driving the vehicle immediately. If that is not possible, use extreme caution while operating the vehicle and only continue to drive the vehicle until you can reach a safe location or repair shop.

Electric parking brake (EPB)

Applying the parking brake

To apply the EPB (electric parking brake):

1.Depress the brake pedal.

2.Pull up the EPB switch.

Make sure the warning light comes on.

Also, the EPB is applied automatically if the Auto Hold button is on when the Engine Start/Stop Button is OFF position. (for shift by cable)

Also, the EPB is applied automatically when the Engine Start/Stop Button is OFF position.(for shift by wire)

However, if you press the EPB switch after the engine is turned off, the EPB will not be applied.

⚠ CAUTION

Do not operate the parking brake / EPB while the vehicle is moving except in an emergency situation.

Releasing the parking brake

To release the EPB (electric parking brake), press the EPB switch in the following condition:

- Set the Engine Start/Stop Button in the ON position.

• Depress the brake pedal.

Make sure the brake warning light goes off.

To release EPB (electric parking brake) automatically:

• Shift lever in P (Park)

With the engine running depress the brake pedal and shift out of P (Park) to R (Rear), N (Neutral) or D (Drive).

• Shift lever in N (Neutral)

With the engine running depress the brake pedal and shift out of N (Neutral) to R (Rear) or D (Drive).

• Automatic transaxle vehicle

1. Start the engine.
2. Fasten the driver's seat belt.
3. Close the driver's door, engine hood and trunk.
4. Depress the accelerator pedal while the shift lever is in R (Rear), D (Drive) or M (Manual) mode.

Make sure the brake warning light goes off.

✻ NOTICE

- **For your safety, you can engage the EPB even though the Engine Start/Stop Button is in the OFF position, but you cannot release it.**
- **For your safety, depress the brake pedal and release the parking brake manually with the EPB switch when you drive downhill or when backing up the vehicle.**

⚠ CAUTION

- **If the parking brake warning light is still on even though the EPB has been released, have the system checked by an authorized K900 Kia dealer.**
- **Do not drive your vehicle with the EPB applied. It may cause excessive brake pad and brake rotor wear.**

EPB (electric parking brake) may be automatically applied when:

- The EPB is overheated
- Requested by other systems

System warning

■ Type A

■ Type B

OKH053033N

- If you try to drive off depressing the accelerator pedal with the EPB applied, but doesn't release automatically, a warning will sound and a message will appear.
- If the driver's seat belt is not fastened and the engine hood in [D] gear or trunk in [R] gear is opened, a warning will sound and a message will appear.
- If there is a problem with the vehicle, a warning may sound and a message may appear.

If the above situation occurs, depress the brake pedal and release EPB by pressing the EPB switch.

⚠ WARNING

- **To prevent unintentional movement when stopped and leaving the vehicle, do not use the shift lever in place of the parking brake. Set the parking brake and make sure the shift lever is securely positioned in P (Park).**
- **Never allow anyone who is unfamiliar with the vehicle to touch the parking brake. If the parking brake is released unintentionally, serious injury may occur.**
- **All vehicles should always have the parking brake fully engaged when parking to avoid inadvertent movement of the car which can injure occupants or pedestrians.**

⚠ CAUTION

- **A click sound may be heard while operating or releasing the EPB, but these conditions are normal and indicate that the EPB is functioning properly.**
- **When leaving your keys with a parking lot attendant or valet, make sure to inform him/her how to operate the EPB.**
- **The EPB may malfunction if you drive with the EPB applied.**
- **When you automatically release EPB by depressing the accelerator pedal, depress it slowly.**

System warning

■ Type A ■ Type B

OKH053042N

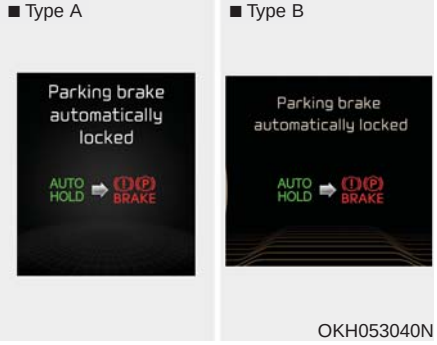
When the conversion from Auto Hold to EPB is not working properly a warning will sound and a message will appear.

⚠ CAUTION

Depress the brake pedal when the above message appears for the Auto Hold and EPB may not activate.

System warning

■ Type A ■ Type B



OKH053040N

If the EPB is applied while Auto Hold is activated because of ESC (Electronic Stability Control) signal, a warning will sound and a message will appear.

EPB malfunction indicator (if equipped)

This warning light illuminates if the engine start/stop button is changed to the ON position and goes off in approximately 3 seconds if the system is operation normally.

If the EPB malfunction indicator remains on, comes on while driving, or does not come on when the engine start/stop button is changed to the ON position, this indicates that the EPB may have malfunctioned.

If this occurs, have your vehicle checked by an authorized K900 Kia dealer as soon as possible.

The EPB malfunction indicator may illuminate when the ESC indicator comes on to indicate that the ESC is not working properly, but it does not indicate a malfunction of the EPB.

⚠ CAUTION

- **The EPB warning light may illuminate if the EPB switch operates abnormally. Shut the engine off and turn it on again after a few minutes. The warning light will go off and the EPB switch will operate normally. However, if the EPB warning light is still on, have the system checked by an authorized K900 Kia dealer.**
- **If the parking brake warning light does not illuminate or blinks even though the EPB switch was pulled up, the EPB is not applied.**
- **If the parking brake warning light blinks when the EPB warning light is on, press the switch, then pull it up. Once more press it back to its original position and pull it back up. If the EPB warning does not go off, have the system checked by an authorized K900 Kia dealer.**

Emergency braking

If there is a problem with the brake pedal while driving, emergency braking is possible by pulling up and holding the EPB switch. Braking is possible only while you are holding the EPB switch.

⚠ WARNING

Do not operate the electric parking brake while the vehicle is moving except in an emergency situation. Applying the electric parking brake while the vehicle is moving at normal speeds can cause a sudden loss of control of the vehicle. If you must use the electric parking brake to stop the vehicle, use great caution in applying the brake.

✻ NOTICE

During emergency braking by the EPB, the parking brake warning light will illuminate to indicate that the system is operating.

⚠ CAUTION

If you notice a continuous noise or burning smell when the EPB is used for emergency braking, have your vehicle checked by an authorized K900 Kia dealer.

When the EPB (electric parking brake) is not released

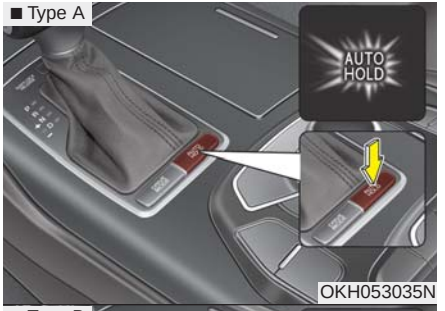
If the EPB does not release normally, take your vehicle to an authorized K900 Kia dealer by loading the vehicle on a flatbed tow truck and have the system checked.

AUTO HOLD (if equipped)

The Auto Hold maintains the vehicle in a standstill even though the brake pedal is not depressed after the driver brings the vehicle to a complete stop by depressing the brake pedal.

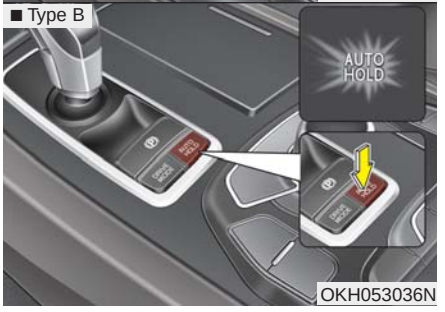
Set up

■ Type A



OKH053035N

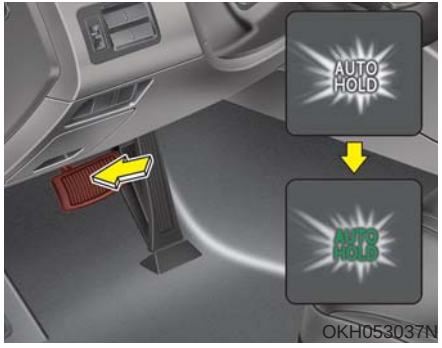
■ Type B



OKH053036N

1. Depress the brake pedal and then press the Auto Hold button. The white AUTO HOLD indicator will come on and the system will be in the standby position.

The driver's door, engine hood and trunk closed and the driver's seat belt must be fastened before EPB will work.



2. When you stop the vehicle completely by depressing the brake pedal, the AUTO HOLD indicator changes from white to green.
3. The vehicle will remain stationary even if you release the brake pedal.
4. If EPB is applied, Auto Hold will be released.

Leaving

If you press the accelerator pedal with the shift lever in R (Reverse), D (Drive) or M (Manual) mode, the Auto Hold will be released automatically and the vehicle will start to move. The indicator changes from green to white.

⚠ WARNING

When driving off from Auto Hold by depressing the accelerator pedal, always check the surrounding area near your vehicle.

Slowly depress the accelerator pedal for a smooth launch.

Cancel

To cancel the Auto Hold operation, press the Auto Hold switch. The AUTO HOLD indicator will go out.

To cancel the Auto Hold operation when the vehicle is at a standstill, press the Auto Hold switch while depressing the brake pedal.

✻ NOTICE

- The Auto Hold does not operate when:
  - The driver's seat belt is unfastened and driver's door is opened
  - The engine hood is opened
  - The trunk is opened
  - The shift lever is in P (Park)
  - The EPB is applied
- For your safety, the Auto Hold automatically switches to EPB in such cases:
  - The driver's seat belt is unfastened and driver's door is opened
  - The engine hood is opened
  - The trunk is opened
  - The vehicle is in a standstill for more than 10 minutes
  - The vehicle is standing on a steep slope
  - The vehicle moved several times

(Continued)

(Continued)

In these cases, the brake warning light comes on, the AUTO HOLD indicator changes from green to white, and a warning sounds and a message will appear to inform you that EPB has been automatically engaged. Before driving off again, press foot brake pedal, check the surrounding area near your vehicle and release parking brake manually with the EPB switch.

- If the AUTO HOLD indicator lights up yellow, the Auto Hold is not working properly. Take your vehicle to an authorized K900 Kia dealer and have the system checked.
- While operating Auto Hold, you may hear mechanical noise. However, it is normal operating noise.

⚠ WARNING

For your safety, cancel the Auto Hold when you drive downhill or back up the vehicle or park the vehicle.

⚠ CAUTION

If there is a malfunction with the driver's door, engine hood or trunk open detection system, the Auto Hold may not work properly.

Take your vehicle to an authorized K900 Kia dealer and have the system checked.

■ Type A

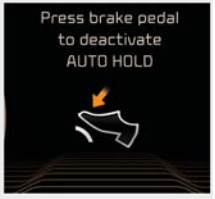
■ Type B

OKH053040N

When the EPB is applied from Auto Hold, the notice will illuminate on the LCD display. Also, warning chime sounds once.

■ Type A

■ Type B



OKH053041N

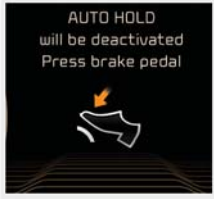
If it is impossible to apply EPB from Auto Hold, the notice will illuminate on the LCD display. Also, warning chime sounds once. In that time, apply the brake pedal.

⚠ CAUTION

If this notice illuminates, the Auto Hold and EPB may not operate. For your safety, apply the brake pedal.

■ Type A

■ Type B



OKH053042N

If you did not apply the brake pedal when you release the Auto Hold by pressing the [AUTO HOLD] switch, the notice will illuminate on the LCD display. Also, warning chime sounds once.

■ Type A

■ Type B

OKH053046N

When you press the [AUTO HOLD] switch, if the driver door, engine hood and trunk are not closed or the driver seat belt is not fastened, the notice will illuminate on the LCD display. Also warning chime sounds once. In that time, press the [AUTO HOLD] button after closing the driver door, engine hood and trunk and fastening the seat belt.

Anti-lock brake system (ABS)

ABS (or ESC) will not prevent accidents due to improper or dangerous driving maneuvers. Even though vehicle control is improved during emergency braking, always maintain a safe distance between you and objects ahead. Vehicle speeds should always be reduced during extreme road conditions.

The vehicle should be driven at reduced speeds in the following circumstances:

- When driving on rough, gravel or snow-covered roads
- When driving with tire chains installed
- When driving on roads where the road surface is pitted or has different surface heights.

Driving in these conditions increases the stopping distance for your vehicle.

The ABS continuously senses the speed of the wheels. If the wheels are going to lock, the ABS system repeatedly modulates the hydraulic brake pressure to the wheels.

When you apply your brakes under conditions which may lock the wheels, you may hear a “tik-tik” sound from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your ABS is active.

In order to obtain the maximum benefit from your ABS in an emergency situation, do not attempt to modulate your brake pressure and do not try to pump your brakes. Press your brake pedal as hard as possible or as hard as the situation allows the ABS to control the force being delivered to the brakes.

✻ NOTICE

A click sound may be heard in the engine compartment when the vehicle begins to move after the engine is started. These conditions are normal and indicate that the anti-lock brake system is functioning properly.

- Even with the anti-lock brake system, your vehicle still requires sufficient stopping distance. Always maintain a safe distance from the vehicle in front of you.
- Always slow down when cornering. The anti-lock brake system cannot prevent accidents resulting from excessive speeds.
- On loose or uneven road surfaces, operation of the anti-lock brake system may result in a longer stopping distance than for vehicles equipped with a conventional brake system.

WKH-014

The ABS warning light will stay on for approximately 3 seconds after the ignition switch is ON. During that time, the ABS will go through self-diagnosis and the light will go off if everything is normal. If the light stays on, you may have a problem with your ABS but your regular brakes will work normally. Contact an authorized K900 Kia dealer as soon as possible.

- When you drive on a road with poor traction, such as an icy road, and operated your brakes continuously, the ABS will be active continuously and the ABS warning light may illuminate. Pull your vehicle over to a safe place and stop the engine.
- Restart the engine. If the ABS warning light is off, then your ABS is normal. Otherwise, you may have a problem with the ABS. Contact an authorized K900 Kia dealer as soon as possible.

✻ NOTICE

When you jump start your vehicle because of a drained battery, the engine may not run as smoothly and the ABS warning light may turn on at the same time. This happens because of the low battery voltage. It does not mean your ABS has malfunctioned.

- **Do not pump your brakes!**
- **Have the battery recharged before driving the vehicle.**

Electronic stability control (ESC)

The Electronic Stability control (ESC) system is designed to stabilize the vehicle during cornering maneuvers. ESC checks where you are steering and where the vehicle is actually going. ESC applies the brakes on individual wheels and intervenes with the engine management system to stabilize the vehicle.

Electronic stability control (ESC) will not prevent accidents. Excessive speed in turns, abrupt maneuvers and hydroplaning on wet surfaces can still result in serious accidents. Only a safe and attentive driver can prevent accidents by avoiding maneuvers that cause the vehicle to lose traction. Even with ESC installed, always follow all the normal precautions for driving - including driving at safe speeds for the conditions.

The Electronic Stability Control (ESC) system is an electronic system designed to help the driver maintain vehicle control under adverse conditions. It is not a substitute for safe driving practices. Factors including speed, road conditions and driver steering input can all affect whether ESC will be effective in preventing a loss of control. It is still your responsibility to drive and corner at reasonable speeds and to leave a sufficient margin of safety.

When you apply your brakes under conditions which may lock the wheels, you may hear a “tik-tik” sound from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your ESC is active.

ESC operation

ESC ON condition

- When the ignition is turned ON, ESC and ESC OFF indicator lights illuminate for approximately 3 seconds, then ESC is turned on.
- Press the ESC OFF button for at least half a second after turning the ignition ON to turn ESC off. (ESC OFF indicator will illuminate). To turn the ESC on, press the ESC OFF button (ESC OFF indicator light will go off).
- When starting the engine, you may hear a slight ticking sound. This is the ESC performing an automatic system self-check and does not indicate a problem.

When operating

When the ESC is in operation, ESC indicator light blinks.

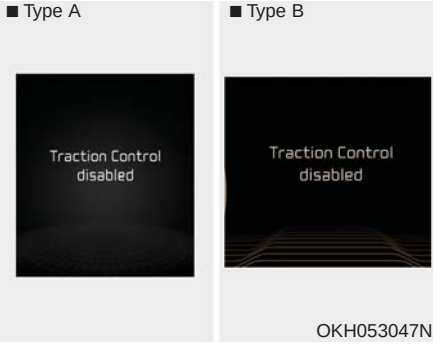
- When the Electronic Stability Control is operating properly, you can feel a slight pulsation in the vehicle. This is only the effect of brake control and indicates nothing unusual.
- When moving out of the mud or slippery road, pressing the accelerator pedal may not cause the engine rpm (revolutions per minute) to increase.

ESC operation off

ESC OFF state

This car has 2 kinds of ESC off states.

If the engine stops when ESC is off, ESC remains off. Upon restarting the engine, the ESC will automatically turn on again.



• ESC off state 1

To cancel ESC operation, press the ESC OFF button (ESC OFF) shortly (ESC OFF indicator light (ESC OFF) illuminates). At this state, the engine control function does not operate. It means the traction control function does not operate. Brake control function only operates.

• ESC off state 2

To cancel ESC operation, press the ESC OFF button (ESC OFF) for more than 3 seconds. ESC OFF indicator light (ESC OFF) illuminates and ESC OFF warning chime will sound. At this state, the engine control function and brake control function do not operate. It means the car stability control function does not operate any more.

Indicator light

■ ESC indicator light

■ ESC OFF indicator light

When the ignition switch is turned ON, the indicator light illuminates, then goes off if ESC system is operating normally.

The ESC indicator light blinks whenever ESC is operating.

The ESC indicator light blinks whenever ESC is operating or illuminates when ESC fails to operate.

The ESC OFF indicator light comes on when the ESC is turned off with the button.

Driving with varying tire or wheel sizes may cause the ESC system to malfunction. When replacing tires, make sure they are the same size as your original tires.

⚠ WARNING

■ Electronic stability control

Drive carefully even though your vehicle has Electronic Stability Control. It can only assist you in maintaining control under certain circumstances.

ESC OFF usage

When driving

- It's a good idea to keep the ESC turned on for daily driving whenever possible.
- To turn ESC off while driving, press the ESC OFF button while driving on a flat road surface.

Never press the ESC OFF button while ESC is operating (ESC indicator light blinks).

If ESC is turned off while ESC is operating, the vehicle may slip out of control.

⚠ WARNING

■ Operating ESC

Never press the ESC OFF button while ESC is operating.

If the ESC is turned off while ESC is operating, the vehicle may go out of control.

Hill-start assist control (HAC)

Hill start Assist Control is a comfort function. The main intent is to prevent the vehicle from rolling backwards while driving uphill on an inclined surface. HAC holds the braking pressure builtup by driver during stopping procedure for 2 seconds after releasing brake pedal.

During the pressure-hold period, the driver has enough time to press the accelerator pedal to drive off.

The braking pressure is reduced as soon as the system detects the driver's intention to drive off.

⚠ WARNING

■ Activating HAC

Drivers should pay close attention when activating the HAC. The vehicle may roll backward causing an accident due to insufficient brake hold pressure.

- The HAC does not operate when the transaxle shift lever is in the P (Park) or N (Neutral) position.
- The HAC activates even though the ESC is off but it does not activate when the ESC has malfunctioned.

Good braking practices

- Check to be sure the parking brake is not engaged and that the parking brake indicator light is out before driving away.
- Driving through water may get the brakes wet. They can also get wet when the vehicle is washed. Wet brakes can be dangerous! Your vehicle will not stop as quickly if the brakes are wet. Wet brakes may cause the vehicle to pull to one side.

  To dry the brakes, apply the brakes lightly until the braking action returns to normal, taking care to keep the vehicle under control at all times. If the braking action does not return to normal, stop as soon as it is safe to do so and call an authorized K900 Kia dealer for assistance.
- Don't coast down hills with the vehicle out of gear. This is extremely hazardous. Keep the vehicle in gear at all times, use the brakes to slow down, then shift to a lower gear so that engine braking will help you maintain a safe speed.

- Don't "ride" the brake pedal. Resting your foot on the brake pedal while driving can be dangerous because the brakes might overheat and lose their effectiveness. It also increases the wear of the brake components.
- If a tire goes flat while you are driving, apply the brakes gently and keep the vehicle pointed straight ahead while you slow down. When you are moving slowly enough for it to be safe to do so, pull off the road and stop in a safe place.
- If your vehicle is equipped with an automatic transaxle, don't let your vehicle creep forward. To avoid creeping forward, keep your foot firmly on the brake pedal when the vehicle is stopped.
- Be cautious when parking on a hill. Firmly engage the parking brake and place the shift lever in P (Park). If your vehicle is facing downhill, turn the front wheels into the curb to help keep the vehicle from rolling. If your vehicle is facing uphill, turn the front wheels away from the curb to help keep the vehicle from rolling. If there is no curb or if it is required by other conditions to keep the vehicle from rolling, block the wheels.
- Under some conditions your parking brake can freeze in the engaged position. This is most likely to happen when there is an accumulation of snow or ice around or near the rear brakes or if the brakes are wet. If there is a risk that the parking brake may freeze, apply it only temporarily while you put the shift lever in P (Park) and block the rear wheels so the vehicle cannot roll. Then release the parking brake.
- Do not hold the vehicle on the upgrade with the accelerator pedal. This can cause the transaxle to overheat. Always use the brake pedal or parking brake.

ADVANCED VEHICLE SAFETY MANAGEMENT (AVSM) (IF EQUIPPED)

The AVSM assists the driver by providing notification is the system detects on object ahead that is too close to the vehicle and which may require the dirver to apply the brake pedal or reduce vehicle speed. If the AVSM detects such an object, the system will issue a caution message, provide a warning sound, and the seat belt vibrate.

❈ The seat belt vibration is a optional function.

■ Type A

■ Type B

OKH053049N

- If the AVSM senses the object ahead is too close to the vehicle that the driver needs to operate the brake pedal, the warning light above will illuminate.

  Immediately reduce your speed.
- If the AVSM senses objects, the warning sound also operates and the seat belt vibrates.

  Immediately reduce your speed.

❈ The seat belt vibration is a optional function.

This system is only a supplemental system and it is not intended to, nor does it replace the need for extreme care and attention of the driver. The sensing range and objects detectable by the sensors are limited. Pay attention to the road conditions at all times.

Brake operation

- If the driver releases the accelerator after the warning, the AVSM automatically brakes the vehicle gently.
- If the driver hits the brake to reduce vehicle speed, the brake assistant system operates to raise braking efficiency.
- If the system detects that the object is at a fair distance away and the driver depresses the accelerator or releases the brake pedal, braking will stop.

⚠ WARNING

The AVSM does not stop the vehicle completely and does not avoid collisions. Always look ahead cautiously to prevent unexpected and sudden situations from occurring.

Seat belt operating (if equipped)

The seat belt may tighten if the system detects that a vehicle of object is close.

⚠ WARNING

The AVSM operates according to the distance to the vehicle ahead, the relative velocity of the vehicles and the driver's operation of the brake or accelerator pedal. Always pay attention to the road and road conditions.

User setting mode

■ Type A

■ Type B

OKH053123N

1. In user setting mode select the AVSM.
2. If you select [OFF], the warning for collision or brake control is cancelled and [AVSM OFF] indicator will turn on. If you select [ON], the warning for collision or brake control is operated and [AVSM OFF] indicator will turn off.

⚠ CAUTION

- **When the AVSM system is turned off, make sure that the vehicle is stopped.**
- **When the engine is started, the AVSM is automatically turned on. To turn the AVSM system off, select the AVSM OFF in USM (User Settings Mode).**
- **If the AVSM ON is selected in USM (User Settings Mode), and if the ESC is turned off by pressing the ESC OFF button, the AVSM function is automatically cancelled.**

Malfunction indicator

■ Type A ■ Type B

- The AVSM OFF indicator will illuminate when the Engine Start/Stop Button is turned ON, but should go off after approximately 3 seconds. If the indicator does not come on, or continuously remains on after coming on for about 3 seconds when you turn the Engine Start/Stop Button to the ON position, or if the indicator comes on while driving, the AVSM is not working properly. Take your vehicle to an authorized K900 Kia dealer and have the system checked.
- The AVSM OFF indicator may illuminate when the ESC indicator or SCC indicator comes on, but it does not indicate a malfunction of the AVSM.

⚠ WARNING

The AVSM is not a substitute for safe driving practices. It is the responsibility of the driver to always check the speed and the distance to the vehicle ahead.

⚠ WARNING

- Even if there is a malfunction to the brake operation of the AVSM, when you depress the brake pedal, the brake operates normally. AVSM brake operation does not operate in certain hazardous situations.
- The AVSM is designed to function above approximately 10 mph (15 km/h) and below approximately 110 mph (180 km/h).
- The AVSM does not detect:
  - Persons or animals.
  - Oncoming vehicles in the opposite lane or a vehicle in an intersection.
  - Stopped objects.
- The AVSM can not detect the objects, when:
  - The sensors are stained with dirt or covered.
  - There is heavy rain or heavy snow.

(Continued)

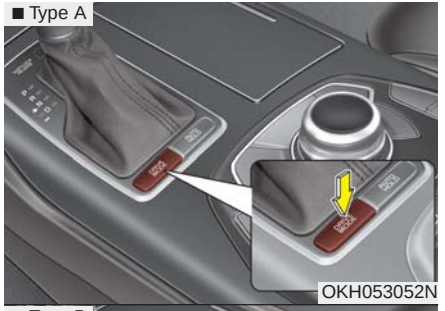
(Continued)

  - There is interference by electromagnetic waves.
  - There are strong radar reflections.
  - Driving in a curve.
  - Driving uphill or downhill.
  - Driving in areas under construction.
  - A object ahead is very narrow such as motorcycles or bicycles.
  - A vehicle cuts in suddenly.
- The AVSM brake operation does not operate, if the driver does not release the accelerator pedal or does not operate the brake pedal.

DRIVE MODE INTEGRATED CONTROL SYSTEM

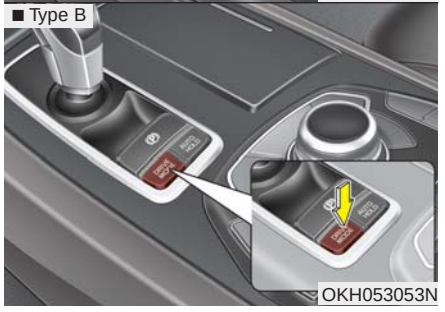
DRIVE mode / SNOW mode

■ Type A



OKH053052N

■ Type B



OKH053053N

OKH053103N

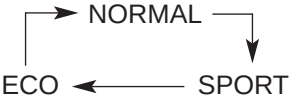
The drive mode may be selected according to the driver's preference or road condition.

The system initializes to the normal mode after the engine start/stop button has been turned off and on.

It is displayed on the AVN monitor which mode the vehicle is in as below.

- NORMAL
- ECO
- SPORT
- SNOW (if equipped)

The mode changes whenever the DRIVE MODE button is pressed.



❉ When normal mode is selected, it is not displayed on the cluster.

If the SNOW MODE button is pressed, the SNOW mode will operate regardless of whichever DRIVE MODE (NORMAL/SPORT/ECO) is operating.

If the button is pressed once more, the DRIVE MODE (NORMAL/SPORT/ECO) that was operating previously will operate.

❉ SNOW MODE : if equipped

ECO mode (Active ECO)

Active ECO helps improve fuel efficiency by controlling certain engine and transaxle system operating parameters. Fuel efficiency depends on the driver's driving habit and road condition.

- When the DRIVE MODE button is pressed and the ECO mode is selected, the ECO indicator (green) will illuminate to show that the Active ECO is operating.
- When the Active ECO is activated, and the engine start/stop button is turned off and on it will change to NORMAL mode. To turn on the ECO mode press the DRIVE MODE button till it is selected.

When Active ECO is activated:

- The acceleration may slightly be reduced eventhough you depress the accelerator fully.
- The air conditioner performance may be limited
- The shift pattern of the automatic transaxle may change.
- The engine noise may get louder.

The above situations are normal conditions when the active eco system is activated to improve fuel efficiency.

Limitation of Active ECO operation:

If the following conditions occur while Active ECO is operating, the system operation is limited even though there is no change in the ECO indicator.

- When the coolant temperature is low:

  The system will be limited until engine performance becomes normal.
- When driving up a hill:

  The system will be limited to gain power when driving uphill because the engine torque is restricted.
- When using manual mode:

  The system will be limited according to the shift location.
- When the accelerator pedal is deeply depressed for a few seconds:

  The system will be limited, judging that the driver wants to speed up.

SPORT mode

SPORT mode focuses on dynamic driving by automatically controlling the steering wheel, engine and transaxle system.

- When the DRIVE MODE button is pressed and the SPORT mode is selected, the SPORT indicator (yellow) will illuminate.
- When the SPORT mode is activated, and the engine start/stop button is turned off and on it will change to NORMAL mode. To turn on the SPORT mode press DRIVE MODE button again.
- If the system is activated:
  - After speeding, it maintains the gear and RPM for some time even though the accelerator pedal is not depressed.
  - Up-shifting is delayed.

✻ NOTICE

In Sport drive mode, the fuel efficiency may decrease.

SNOW mode (if equipped)

Snow mode helps the driver to drive more effectively on slippery roads such as snowy or muddy roads.

- If the SNOW MODE button is pressed, the SNOW mode will operate regardless of whichever DRIVE mode (NORMAL/SPORT/ECO) is operating. If the button is pressed once more, the DRIVE mode (NORMAL/SPORT/ECO) that was operating previously will operate.

CRUISE CONTROL SYSTEM (IF EQUIPPED)

The cruise control system allows you to program the vehicle to maintain a constant speed without depressing the accelerator pedal.

This system is designed to function above approximately 20 mph (30 km/h).

If the cruise control is left on, (CRUISE indicator light in the instrument cluster illuminated) the cruise control can be switched on accidentally. Keep the cruise control system off (CRUISE indicator light OFF) when the cruise control is not in use, to avoid inadvertently setting a speed.

Use the cruise control system only when traveling on open highways in good weather.

Do not use the cruise control when driving in heavy or varying traffic, or on slippery (rainy, icy or snow-covered) or winding roads or over 6% up-hill or down-hill roads.

✻ NOTICE

- **During normal cruise control operation, when the SET switch is activated or reactivated after applying the brakes, the cruise control will energize after approximately 3 seconds. This delay is normal.**
- **To activate cruise control, depress the brake pedal at least once after turning the ignition switch to the ON position or starting the engine. This is to check if the brake switch which is important part to cancel cruise control is in normal condition.**

⚠ WARNING

■ Misuse of Cruise Control or Cruise Control Misuse

Do not use cruise control if the traffic situation does not allow you to drive safely at a constant speed and with sufficient distance to the vehicle in front.

Cruise control switch

OKH053119N

CRUISE : Turns cruise control system on or off.

CANCEL : Cancels cruise control operation.

RES+: Resumes or increases cruise control speed.

SET-: Sets or decreases cruise control speed.

To set cruise control speed:

OKH053058N

1. Move the lever up (to CRUISE), to turn the system on. The CRUISE indicator light will illuminate.
2. Accelerate to the desired speed, which must be more than 20 mph (30 km/h).

OKH053059N

3. Lever must be moved down (to SET-) prior to setting any desired speed. The SET indicator light in the instrument cluster will illuminate. Release the accelerator at the same time. The desired speed will automatically be maintained.

On a steep grade, the vehicle may slow down or speed up slightly while going uphill or downhill.

To increase cruise control set speed:

OKH053060N

Follow either of these procedures:

- Move the lever up (to RES+) and hold it. Your vehicle will accelerate. Release the lever at the speed you want.
- Move the lever up (to RES+) and release it immediately. The cruising speed will increase by 2.0 km/h or 1 mph each time you move the lever up (to RES+) in this manner.

To decrease the cruising speed:

OKH053059N

Follow either of these procedures:

- Move the lever down (to SET-) and hold it. Your vehicle will gradually slow down. Release the lever at the speed you want to maintain.
- Move the lever down (to SET-) and release it immediately. The cruising speed will decrease by 2.0 km/h or 1 mph each time you move the lever down (to SET-) in this manner.

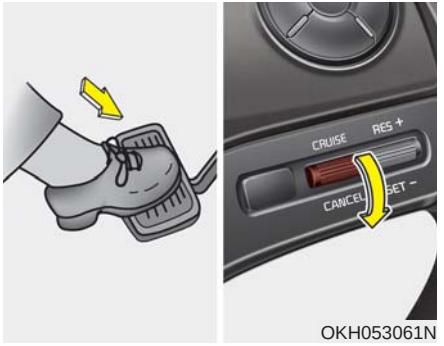
To temporarily accelerate with the cruise control on:

If you want to speed up temporarily when the cruise control is on, depress the accelerator pedal. Increased speed will not interfere with cruise control operation or change the set speed.

To return to the set speed, take your foot off the accelerator pedal.

If you move the lever down (to SET-) at increased speed, the cruising speed will be set again.

To cancel cruise control, do one of the following:



OKH053061N

- Depress the brake pedal.
- Shift into N (Neutral) with an automatic transaxle.
- Move up the lever (to CANCEL) located on the steering wheel.
- Decrease the vehicle speed lower than the memory speed by 12 mph (20 km/h).
- Decrease the vehicle speed to less than approximately 20 mph (30 km/h).
- Increasing the vehicle speed to more than approximately 125 mph (200 km/h).
- The ESC is operating.
- Downshifting to the 2nd gear with manual mode.
- Operating the EPB switch. Do not operate the parking brake while driving except in an emergency situation.

Each of these actions will cancel cruise control operation (the SET *indicator light in the instrument cluster will go off), but it will not turn the system off. If you wish to resume cruise control operation, move up the lever (to RES+) located on your steering wheel. You will return to your previously preset speed.*

To resume cruising speed at more than approximately 20 mph (30 km/h):

OKH053060N

If any method other than the CRUISE lever was used to cancel cruising speed and the system is still activated, the most recent set speed will automatically resume when you move the lever up (to RES+).

It will not resume, however, if the vehicle speed has dropped below approximately 20 mph (30 km/h).

✻ NOTICE

Always check the road conditions when you move the lever up (to RES+) to resume the speed.

To turn cruise control off, do one of the following:

OKH053058N

- Move the lever up (to CRUISE). (the CRUISE indicator light in the instrument cluster will go off)
- Turn the Engine Start / Stop Button off.

Both of these actions cancel cruise control operation. If you want to resume cruise control operation, repeat the steps provided in "To set cruise control speed" on the previous page.

ADVANCED SMART CRUISE CONTROL SYSTEM (ASCC) (IF EQUIPPED)

OKH053062N

■ Type A

■ Type B

OKH053063N

① Cruise indicator
② SET indicator
③ Set speed
④ Vehicle-to-vehicle distance

The ASCC allows you to program the vehicle to maintain a set speed so long as it is not limited by traffic. When traffic is encountered the vehicle will slow down to maintain a set distance behind traffic without depressing the accelerator or brake pedal.

⚠ WARNING

- **If the ASCC is left on, (CRUISE indicator light in the instrument cluster illuminated) the ASCC can be activated unintentionally. Keep the ASCC off (CRUISE indicator light OFF) when the ASCC is not in use, to avoid inadvertently setting a speed.**
- **Use the ASCC only when traveling on open highways in good weather.**

(Continued)

(Continued)

- **Do not use the ASCC when it may not be safe to keep the car at a constant speed, for instance, driving in heavy or varying traffic, or on slippery (rainy, icy or snow-covered) or winding roads or over 6% uphill or down-hill roads.**
- **Pay particular attention to the driving conditions whenever using the ASCC.**
- **Be careful when driving downhill using the ASCC.**
- **The ASCC is not a substitute for safe driving practices. It is the responsibility of the driver to always check the speed and distance to the vehicle ahead.**

Speed setting (ASCC)

To set cruise control speed:

OKH053058N

1. Move the lever up (to CRUISE), to turn the system on. The CRUISE indicator light in the instrument cluster will illuminate.
2. Accelerate to the desired speed.
   - 20 mph (30 km/h) ~ 110 mph (180 km/h) : when there is no vehicle in front
   - 0 mph (0 km/h) ~ 110 mph (180 km/h) : when there is a vehicle in front

OKH053059N

3. Lever must be moved down (to SET-) prior to setting any desired speed. The SET indicator light, set speed and vehicle to vehicle distance on the LCD screen will illuminate.
4. Release the accelerator pedal. The desired speed will automatically be maintained.

If there is a vehicle in front of you, the speed may decrease to maintain the distance to the vehicle ahead.

On a steep grade, the vehicle may slow down or speed up slightly while going uphill or downhill.

To increase cruise control set speed:

OKH053060N

Follow either of these procedures:

- Move the lever up (to RES+), and hold it. Your vehicle set speed will increase by 5 mph (10 km/h). Release the lever at the speed you want.
- Move the lever up (to RES+), and release it immediately. The cruising speed will increase by 1 mph (1.0 km/h) each time you move the lever up (to RES+) in this manner.
- ASCC will operate to a maximum setting of 110 mph (180 km/h). However all local speed limit laws must be followed.

To decrease the crusie control set speed:

OKH053059N

Follow either of these procedures:

- Move the lever down (to SET-), and hold it. Your vehicle set speed will decrease by 5 mph (10 km/h). Release the lever at the speed you want.
- Move the lever down (to SET-), and release it immediately. The cruising speed will decrease by 1 mph (1.0 km/h) each time you move the lever down (to SET-) in this manner.
- You can set the cruise control to any speed above 20 mph (30 km/h).

To temporarily accelerate with the cruise control on:

If you want to speed up temporarily when the cruise control is on, depress the accelerator pedal. Increased speed will not interfere with cruise control operation or change the set speed.

To return to the set speed, take your foot off the accelerator.

If you move the lever down (to SET-) at increased speed, the cruising speed will be set again.

✻ NOTICE

Be careful when accelerating temporarily, because the speed is not regulated automatically at this time even if there is a vehicle in front of you.

ASCC will be temporarily canceled when:

OKH053061N

Cancelled manually

- The brake pedal is depressed.
- Move down the lever (to CANCEL) located on the steering wheel.

The ASCC turns off temporarily when the indicator on the LCD display turns off.

The CRUISE indicator is illuminated continuously.

Cancelled automatically

- The driver's door is opened.
- The shift lever is shifted to N (Neutral), R (Reverse) or D (Drive).
- The EPB (electronic parking brake) is applied.
- The vehicle speed is over 110 mph (180 km/h)
- The vehicle stops on a steep incline.
- The ESC or ABS is operating.
- The ESC is turned off.
- The sensor or the cover is dirty or blocked with foreign matter.
- When the vehicle is stopped for over 5 minutes.
- The vehicle stops and go repeatedly for a long period of time.
- The driver starts driving by depressing the accelerator pedal or move up the lever (to RES+), if a vehicle stops far away ahead of the your vehicle.
- The accelerator pedal is continuously depressed for more than 1 minute.

Each of these actions will cancel the ASCC operation. (the SET indicator, set speed and vehicle to vehicle distance on the LCD display will go off.)

In a condition the ASCC is cancelled automatically, the ASCC will not resume even though the RES+ or SET- lever is moved. Also, the EPB (electronic parking brake) will be applied when the vehicle is stopped.

⚠ CAUTION

If the ASCC is cancelled by other than the reasons mentioned, have the system checked by an authorized K900 Kia dealer.

■ Type A

■ Type B

OKH053068N

If the system is cancelled, the warning chime will sound and a message will appear for a few seconds.

You must adjust the vehicle speed by depressing the accelerator or brake pedal according to the road condition ahead and driving condition.

Always check the road conditions. Do not rely on the warning chime.

To resume cruise control set speed:

OKH053060N

If any method other than the CRUISE lever was used to cancel cruising speed and the system is still activated, the cruising speed will automatically resume when you move the lever up/down (to RES+ or SET-).

If you move the lever up (to RES+), the speed will resume to the recently set speed. It will not resume if the vehicle speed has dropped below approximately 20 mph (30 km/h).

✻ NOTICE

Always check the road conditions when you move the lever up (to RES+) to resume speed.

To turn cruise control off:

OKH053058N

Move the lever up (to CRUISE). (the CRUISE indicator light in the instrument cluster will go off).

Vehicle to vehicle distance setting (ASCC)

To set vehicle to vehicle distance:

OKH053069N

This function allows you to program the vehicle to maintain relative distance to the vehicle ahead without depressing the accelerator pedal or brake pedal.

The vehicle to vehicle distance will automatically activate when the ASCC is on.

Select the appropriate distance according to road conditions and vehicle speed.

Each time the button is pressed, the vehicle to vehicle distance changes as follows:

Distance 4 → Distance 3 → Distance 2 → Distance 1 → Distance 4

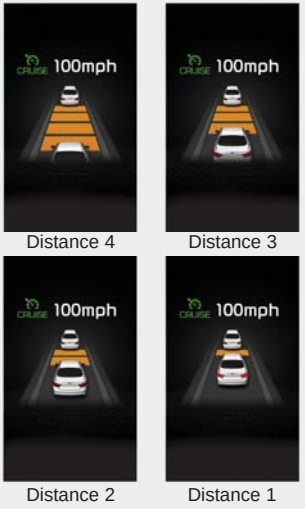
For example, if you drive at 56 mph (90 km/h), the distance is maintained as follows;

Distance 4 - approximately 172 feet (52.5 m)
Distance 3 - approximately 130 feet (40 m)
Distance 2 - approximately 106 feet (32.5 m)
Distance 1 - approximately 82 feet (25 m)

✻ NOTICE

The 'Distance 4' is always set when the system is used for the first time after starting the engine.

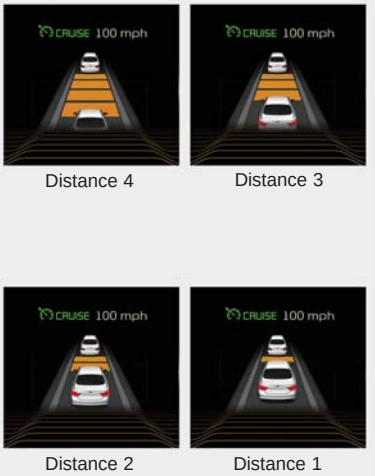
■ Type A



Distance 4 Distance 3

Distance 2 Distance 1

■ Type B



Distance 4 Distance 3

Distance 2 Distance 1

OKH053070N/OKH053071N

- The vehicle will maintain the set speed, when the lane ahead is clear.
- The vehicle will slow down or speed up within selected speed to maintain the selected distance, when there is a vehicle ahead of you in the lane. (A vehicle will appear in front of your vehicle in the LCD display only when there is an actual vehicle in front of you)
- If the vehicle ahead speeds up, your vehicle will travel at a steady cruising speed after accelerating to the selected speed.

⚠ CAUTION

- **The warning chime sounds and malfunction indicator blinks if it is hard to maintain the selected distance to the vehicle ahead.**
- **If the warning chime sounds, actively adjust the vehicle speed by depressing the brake pedal according to the road condition ahead and driving condition.**
- **Even if the warning chime is not activated, always pay attention to the driving conditions to prevent dangerous situations from occurring.**

■ Type A

■ Type B

OKH053072N

⚠ CAUTION

If the vehicle ahead (vehicle speed: less than 20 mph (30 km/h)) disappears to the next lane, the warning chime will sound and a message will appear. Adjust your vehicle speed for vehicles or objects that can suddenly appear in front of you by depressing the brake pedal according to the road condition ahead and driving condition.

In traffic situation

■ Type A

■ Type B

OKH053073N

In traffic, your vehicle will stop if the vehicle ahead of you stops. Also, if the vehicle ahead of you starts moving, your vehicle will start as well. However, if the vehicle stops for more than 3 seconds, you must depress the accelerator pedal or move the lever (to RES+ or SET-) to start driving.

Sensor to detect distance to the vehicle ahead

OKH053074N

The sensor detects distance to the vehicle ahead.

If the sensor is covered with dirt or other foreign matter, the vehicle to vehicle distance control may not operate correctly.

Always keep the sensor clean.

Sensor malfunction indicator

If the sensor or cover is dirty or obscured with foreign matter such as snow, the indicator will illuminate. Clean the sensor by using a soft cloth.

ASCC malfunction indicator

The warning light illuminates when the vehicle to vehicle distance control system is not functioning normally.

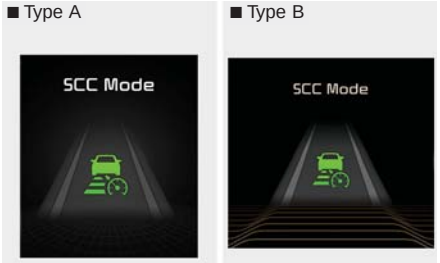
Take your vehicle to an authorized K900 Kia dealer and have the system checked.

⚠ CAUTION

- **Do not install accessories around the sensor and do not replace the bumper by yourself. It may interfere with the sensor performance.**
- **Always keep the sensor and bumper clean.**
- **To prevent sensor cover damage from occurring, wash the car with a soft cloth.**
- **Do not damage the sensor or sensor area by a strong impact. If the sensor moves slightly off position, the ASCC will not operate correctly.**

  If this occurs, have your vehicle checked by an authorized K900 Kia dealer as soon as possible.
- **Use only a genuine Kia sensor cover for your vehicle.**

To convert to cruise control mode:



The driver may choose to only use the cruise control mode (speed control function) by doing as follows:

1. Turn the ASCC on (the cruise indicator light will be on but the system will not be activated).
2. Push the distance to distance switch for more than 2 seconds.
3. Choose between "Smart cruise control(SCC) mode" and "Cruise control(CC) mode".

⚠ WARNING

When using the cruise control mode, you must manually assess the distance to other vehicles as the system will not automatically brake to slow down for other vehicles.

Limitations of the system

The ASCC may have limits to its ability to detect distance to the vehicle ahead due to road and traffic conditions.

On curves

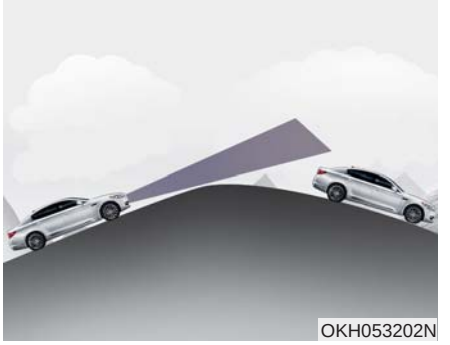
- On curves, the ASCC may not detect a moving vehicle in your lane, and then your vehicle could accelerate to the set speed. Also, the vehicle speed will rapidly slow down when the vehicle ahead is recognized suddenly.

- Select the appropriate set speed on curves and adjust your vehicle speed by depressing the accelerator or brake pedal according to the road condition ahead and driving condition.

OKH053201N

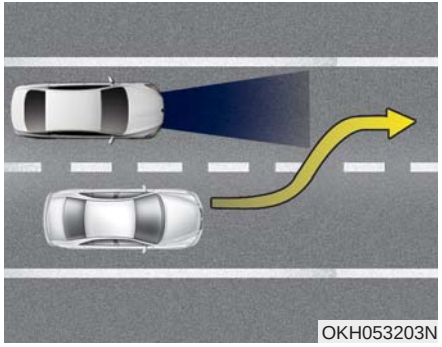
- Your vehicle speed can be reduced due to a vehicle in the adjacent lane. Adjust your vehicle speed by depressing the brake pedal according to the road condition ahead and driving condition. Apply the accelerator pedal and select the appropriate set speed. Check to be sure that the road conditions permit safe operation of the ASCC.

On inclines

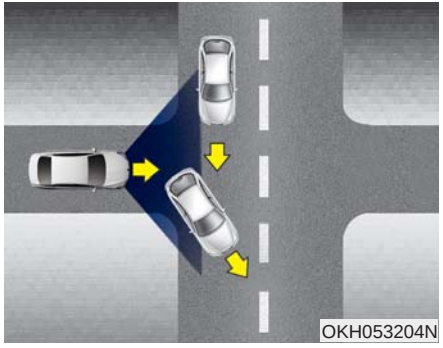

OKH053202N

- During uphill or downhill driving, the ASCC may not detect a moving vehicle in your lane, and cause your vehicle to accelerate to the set speed. Also, the vehicle speed will rapidly slow down when the vehicle ahead is recognized suddenly.
- Select the appropriate set speed on inclines and adjust your vehicle speed by depressing the accelerator or brake pedal according to the road condition ahead and driving condition.

Lane changing

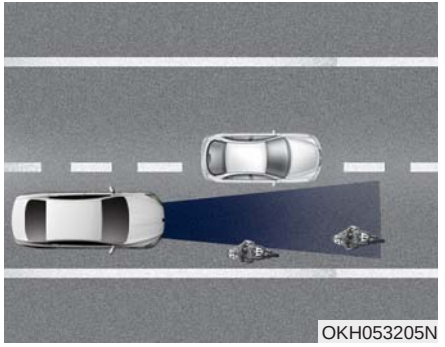

OKH053203N

- A vehicle which moves into your lane from an adjacent lane cannot be recognized by the sensor until it is in the sensor's detection range.
- The sensor may not detect immediately when a vehicle cuts in suddenly. Always pay attention to the traffic, road and driving conditions.
- If a vehicle which moves into your lane is slower than your vehicle, your speed may decrease to maintain the distance to the vehicle ahead.
- If a vehicle which moves into your lane is faster than your vehicle, your vehicle will accelerate to the selected speed.


OKH053204N

- Your vehicle may accelerate when a vehicle ahead of you disappears.
- When you are warned that the vehicle ahead of you is not detected, drive with caution.

Vehicle recognition


OKH053205N

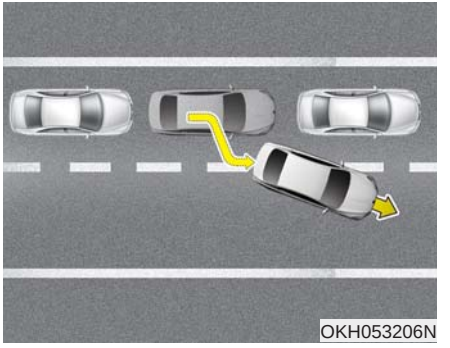
Some vehicles ahead in your lane cannot be recognized by the sensor as follows:

- Narrow vehicles such as motorcycles or bicycles
- Vehicles offset to one side
- Slow-moving vehicles or sudden-decelerating vehicles
- Stopped vehicles
- Vehicles with small rear profile such as trailers with no loads

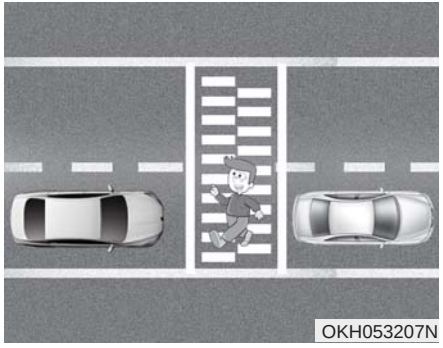
A vehicle ahead cannot be recognized correctly by the sensor if any of following occurs:

- When the vehicle is pointing upwards due to overloading in the trunk
- While making turns by steering
- When driving to one side of the lane
- When driving on narrow lanes or on curves

Adjust your vehicle speed by depressing the brake pedal according to the road condition ahead and driving condition.


OKH053206N

- When vehicles are at a standstill and the vehicle in front of you changes to the next lane, be careful when your vehicle starts to move because it may not recognize the stopped vehicle in front of you.


OKH053207N

- Always look out for pedestrians when your vehicle is maintaining a distance with the vehicle ahead.

OKH053208N

- Always be cautious for vehicles with higher height or vehicles carrying loads that sticks out to the back of the vehicle.

⚠ WARNING

- **The ASCC cannot guarantee the stop for every emergency situation.**

  If an emergency stop is necessary, you must apply the brakes.
- **Keep a safe distance according to road conditions and vehicle speed. If the vehicle to vehicle distance is too close during high-speed driving, a serious collision may result.**
- **The ASCC cannot recognize a stopped vehicle, pedestrians or an oncoming vehicle. Always look ahead cautiously to prevent unexpected and sudden situations from occurring.**

(Continued)

(Continued)

- When other vehicles are changing lanes in front of you frequently, the ASCC may not detect the vehicle at certain times. Always look ahead cautiously to prevent unexpected and sudden situations from occurring.
- The ASCC is not a substitute for safe driving practices but a convenience function only. It is the responsibility of the driver to always check the speed and the distance to the vehicle ahead.
- Always be aware of the selected speed and vehicle to vehicle distance.
- Always maintain sufficient braking distance and decelerate your vehicle by applying the brakes if necessary.

(Continued)

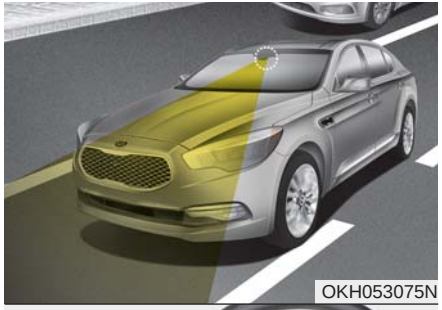
(Continued)

- As the ASCC may not recognize complex driving situations, always pay attention to driving conditions and control your vehicle speed.
- For safe operation, carefully read and follow the instructions in this manual before use.

⚠ CAUTION

The ASCC may not operate temporarily due to electrical interference.

LANE DEPARTURE WARNING SYSTEM (LDWS) (IF EQUIPPED)



OKH053075N

OKH053076N

This system detects the lane with a sensor at the front windshield and notifies you if it detects that your vehicle leaves the lane.

⚠ WARNING

- **The LDWS does not make the vehicle change lanes. It is the driver's responsibility to always check the road conditions.**
- **Do not turn the steering wheel suddenly if the LDWS warns that your vehicle is leaving the lane.**
- **If the sensor cannot detect the lane or if the vehicle speed does not exceed 44 mph (70 km/h), the LDWS will not be able to notify you if the vehicle leaves the lane.**
- **If your vehicle has window tint or other types of coating on the front windshield, the LDWS may not work properly.**
- **Prevent damage to the LDWS sensor from water or any liquid.**
- **Do not remove the LDWS parts and do not damage the sensor by a strong impact.**

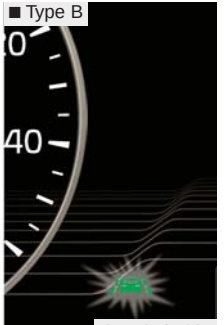
(Continued)

(Continued)

- **Do not put objects that reflect light on the dash board.**
- **The operation of the LDWS can be affected by several factors (including environmental conditions). It is the responsibility of the driver to pay attention to the roadway and to maintain the vehicle in it's lane at all times.**

■ Type A

■ Type B



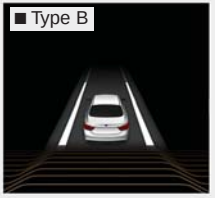
OKH053108N

To operate the LDWS, press the button with the engine start/stop button in the ON position. The indicator (green) illuminates on the cluster. To cancel the LDWS, press the button again.

■ When the sensor detects the lane line

■ Type A

■ Type B

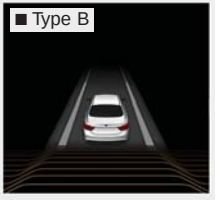


OKH053078N

■ When the sensor doesn't detect the lane line

■ Type A

■ Type B



OKH053079N

If the system detects that your vehicle is leaving the lane when the LDWS is operating and vehicle speed exceeds 44 mph (70 km/h), the warning operates as follows:

■ Lane departure warning (Type A)

OKH053080N

■ Lane departure warning (Type B)

OKH053081N

1.Visual warning

If you leave the lane, the lane you leave on the LCD display blinks yellow.

2.Auditory warning

If you leave the lane, the warning sound operates.

Warning indicator

■ Type A

■ Type B

OKH053212N

If the LDWS warning indicator (yellow) comes on, the LDWS is not working properly. Take your vehicle to an authorized K900 Kia dealer and have the system checked.

The LDWS does not operate when:

- The driver turns on the turn signal or the hazard warning flasher to change lane.
- Driving on the lane line.

✻ NOTICE

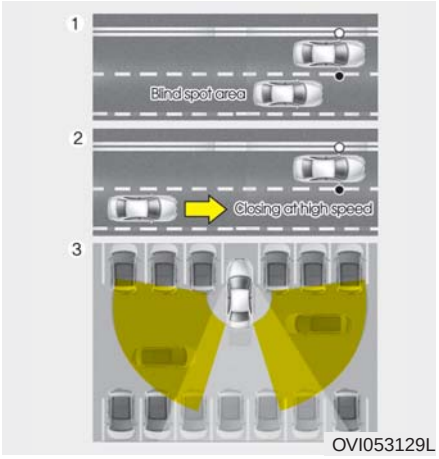
To change lane, operate the turn signal switch then change the lane.

The LDWS may not warn you even if the vehicle leaves the lane, or may warn you even if the vehicle does not leave the lane when;

- The lane can't be visible due to snow, rain, stain, a puddle or other environmental conditions.
- The brightness of the outside changes suddenly such as tunnel enter/exit.
- Not turning on the headlight at night or in the tunnel, or light level is low.
- Difficult to distinguish the color of the lane from the road.
- Driving on a steep grade or a curve.
- Light such as street light, sunlight or oncoming vehicle light reflects from water on the road.
- The lens or windshield is stained with foreign matter.
- The sensor cannot detect the lane because of fog, heavy rain or heavy snow.

- The surrounding of the inside rear view mirror temperature is high due to a direct ray of light.
- The lane is very wide or narrow.
- The lane line is damaged or indistinct.
- The windshield is fogged by humid air in the vehicle.
- The shadow is on the lane line by a median strip.
- The sensor cannot distinguish the lane from the road due to the dust.
- There is a mark similar to a lane line.
- There is a boundary structure.
- The distance from vehicle ahead is very short or the vehicle ahead drives hiding the lane line.
- The vehicle vibrates heavily due to road conditions.
- The lane number increases or decreases or the lane lines are crossing.
- Putting something on the dashboard.
- Driving with the sun in front of you.
- Driving in areas under construction.
- The lane line is more than two in either side (Left/Right)

BLIND SPOT DETECTION SYSTEM (BSD) (IF EQUIPPED)



OVI053129L

The Blind Spot Detection System (BSD) uses a radar sensor to alert the driver.

It senses the rear side territory of the vehicle and provides an indication to the driver if it detects an object approaching from these areas.

(1) BSD (Blind Spot Detection)

The warning range depends on your vehicle speed. However, if your vehicle is about 6 mph (10 km/h) faster than the other vehicle, the system will not warn you.

(2) LCA (Lane Change Assist)

If the system detects a vehicle approaching you at high speed, the system will warn you.

(3) RCTA (Rear Cross Traffic Alert)

If the sensor detects an approaching vehicle from the left and right side as your vehicle moves rearward, the system will warn you.

⚠ WARNING

- **Always check the road condition while driving for unexpected situations even though the Blind Spot Detection System (BSD) is operating.**
- **The Blind Spot Detection System (BSD) is a supplemental system to assist you. Do not solely rely on the system and always pay attention and drive safely.**
- **The Blind Spot Detection System (BSD) is not a substitute for proper and safe driving. Always drive safely and use caution when changing lanes or backing the vehicle up. The Blind Spot Detection System (BSD) may not detect every object alongside the vehicle.**

BSD (Blind Spot Detection) / LCA (Lane Change Assist)

Operating conditions

The indicator on the switch will illuminate when the Blind Spot Detection System (BSD) switch is pressed with the Engine Start/Stop Button ON.

If vehicle speed exceeds about 18.6 mph (30 km/h), the system will activate.

If you press the switch again, the switch indicator and system will be turned off.

If the ignition switch is turned OFF and ON the system returns to the previous state.

When the system is not used turn the system off by turning off the switch.

When the system is turned on the warning light will illuminate for 3 seconds on the outside rearview mirror.

Warning type

The system will activate when:

1. The system is on
2. Vehicle speed is above about 18.6 mph (30 km/h)
3. Other vehicles are detected in the rear side

If a vehicle is detected within the boundary of the system, a warning light will illuminate on the outside rearview mirror and the head up display.

If the detected vehicle is not in warning range, the warning will turn off according to driving conditions.

The second stage alarm will activate when:

1. The first stage alert is on
2. The turn signal is on to change a lane

When the second stage alert is activated, a warning light will blink on the outside rearview mirror, the head up display and a alarm will sound.

If you move the turn signal switch to the original position, the second stage alert will be deactivated.

Detecting sensor

OKH053085N

The sensors are located inside of the rear bumper.

Always keep the rear bumper clean for the system to work properly.

Warning message

■ Type A

■ Type B

OKH053086N

The message will appear to notify the driver if there are foreign substances on the rear bumper or it is hot near the rear bumper. The light on the switch and the system will turn off automatically.

Remove the foreign matter on the rear bumper.

If the system does not work normally even though the foreign matter is removed, take your vehicle to an authorized K900 Kia dealer and have the system checked.

■ Type A

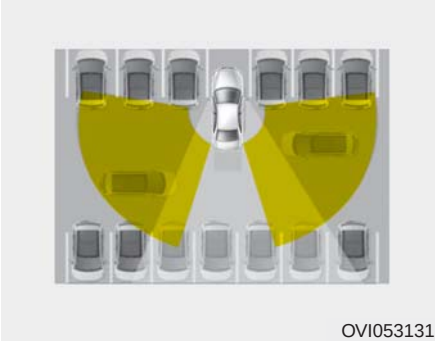
■ Type B

OKH053087N

If the system does not work properly, a warning message will appear and the light on the switch will turn off. The system will turn off automatically.

Have your vehicle inspected by an authorized K900 Kia dealer.

RCTA (Rear cross traffic alert)


OVI053131

When your vehicle moves backwards from a parking position, the sensor detects approaching vehicles to the left or right side direction and gives information to the driver.

Operating conditions

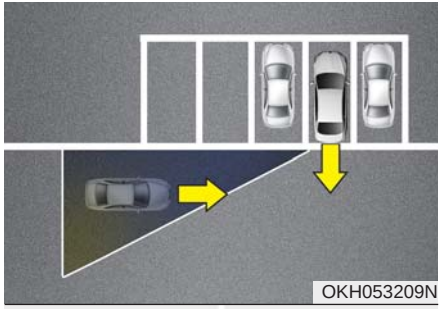
OKH053082N

- The indicator on the switch will illuminate when the Blind Spot Detection System (BSD) switch is pressed with the Engine Start/Stop Button ON.

  The system will turn on and standby to activate.

- The system operates when the vehicle speed is below about 6.2 mph (10 km/h) with the shift lever in R (Reverse).
- The RCTA (Rear Cross Traffic Alert) detecting range is about 1.6 feet ~ 65.6 feet (0.5 m ~ 20m) based on the side direction. However, the system sensing range is different base on conditions. Always pay attention to the surrounding.

Warning type



OKH053209N

OKH053213N

- If the vehicle detected by the sensors approaches your vehicle, the warning chime will sound, the warning light on the outside rearview mirror will blink and a message will appear on the LCD display.
- If the detected vehicle is out of the sensing range of your vehicle, move the vehicle away from the detected object slowly; the warning will be cancelled.
- The system may not operate properly due to other factors or circumstances. Always pay attention to your surrounding.

❊ If your vehicle's left or right side bumper is blinded by barrier or vehicles, the system sensing ability may be reduced.

⚠ WARNING

- **The warning light on the outside rearview mirror will illuminate whenever a vehicle is detected at the rear side by the system.**

  To avoid accidents, do not focus only on the warning light and neglect to see the surrounding of the vehicle.
- **Drive safely even though the vehicle is equipped with a Blind Spot Detection System (BSD) and Rear Cross Traffic Alert (RCTA). Do not solely rely on the system but check for yourself before changing lanes or backing the vehicle up.**

  The system may not alert the driver in some conditions so always check the surroundings while driving.

(Continued)

(Continued)

- **The Blind Spot Detection System (BSD) and Rear Cross Traffic Alert (RCTA) are not a substitute for proper and safe driving. Always drive safely and use caution when changing lanes or backing the vehicles up. The Blind Spot Detection System (BSD) may not detect every object alongside the vehicle.**

⚠ CAUTION

- **The system may not work properly if the bumper has been replaced or if repair work has been done near the sensor.**
- **The detection area differs according to the roads width. If the road is narrow the system may detect other vehicles in the next lane.**
- **In addition, if the road is very wide the system may not detect other vehicles.**
- **The system may turn off due to strong electromagnetic waves.**

Non-operating condition

Driver's Attention

The driver must be cautious in the below situations for the system may not detect other vehicles or objects in certain circumstances.

- Curved roads, tollgates, etc.
- The surrounding of the sensor is polluted with rain, snow, mud, etc
- The rear bumper near the sensor is covered or hidden with a foreign matter such as a sticker, bumper guard, bicycle stand etc.
- The rear bumper is damaged or the sensor is out of place.
- The height of the vehicle is altered such as when the trunk is loaded with heavy objects, or there is low tire pressure etc.
- Bad weather such as heavy rain or snow.
- A fixed object is near such as a guardrail, tunnel, human and animal etc.
- Metal substances are near the vehicles such as in a construction area.

- A big vehicle is near such as a bus or truck.
- A motorcycle or bicycle is near.
- A flat trailer like vehicle is near.
- If the vehicle has started at the same time as the vehicle next to it and has accelerated.
- When the other vehicle passes by very fast.
- When changing lanes.
- When going down or up a steep road where the height of the lane is different.
- When the other vehicle drives at the rear very nearby or drives very close.
- When a trailer or carrier is installed.
- When the temperature of the rear bumper is high.
- When the sensors are covered by the vehicle, wall or a pillar of parking lot.
- When your vehicle is backing up, if the detected vehicle approaches your vehicle or also backs up.
- Small objects like shopping carts and baby carriages.
- If there is a vehicle with decreased ride height (lowered).
- When the vehicle is close to another vehicle.
- When the vehicle in the next lane moves two lanes away from my vehicle OR when the vehicle two lanes away moves to the next lane from my vehicle.

Outside rearview mirror may not alert the driver when:

- The outside rearview mirror housing is damaged or covered with debris.
- The window is covered with debris.
- The windows are severely tinted.

Pursuant to Code of Federal Regulations, Title 47, Part 15 ("FCC Rules").

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

ECONOMICAL OPERATION

Your vehicle's fuel economy depends mainly on your style of driving, where you drive and when you drive.

Each of these factors affects how many miles (kilometers) you can get from a gallon (liter) of fuel. To operate your vehicle as economically as possible, use the following driving suggestions to help save money in both fuel and repairs:

- Drive smoothly. Accelerate at a moderate rate. Don't make "jackrabbit" starts or full-throttle shifts and maintain a steady cruising speed. Don't race between stoplights. Try to adjust your speed to the traffic so you don't have to change speeds unnecessarily. Avoid heavy traffic whenever possible. Always maintain a safe distance from other vehicles so you can avoid unnecessary braking. This also reduces brake wear.
- Drive at a moderate speed. The faster you drive, the more fuel your vehicle uses. Driving at a moderate speed, especially on the highway, is one of the most effective ways to help reduce fuel consumption.
- Don't "ride" the brake pedal. This can increase fuel consumption and also increase wear on brake components. In addition, driving with your foot resting on the brake pedal may cause the brakes to overheat, which reduces their effectiveness and may lead to more serious consequences.
- Take care of your tires. Keep them inflated to the recommended pressure. Incorrect inflation, either too much or too little, results in unnecessary tire wear. Check the tire pressures at least once a month.
- Be sure that the wheels are aligned correctly. Improper alignment can result from hitting curbs or driving too fast over irregular surfaces. Poor alignment causes faster tire wear and may also result in other problems as well as greater fuel consumption.
- Keep your vehicle in good condition. For better fuel economy and reduced maintenance costs, maintain your vehicle in accordance with the maintenance schedule in section 7. If you drive your vehicle in severe conditions, more frequent maintenance is required (see section 7 for details).
- Keep your vehicle clean. For maximum service, your vehicle should be kept clean and free of corrosive materials. It is especially important that mud, dirt, ice, etc. not be allowed to accumulate on the underside of the vehicle. This extra weight can result in increased fuel consumption and also contribute to corrosion.
- Travel lightly. Don't carry unnecessary weight in your vehicle. Weight reduces fuel economy.
- Don't let the engine idle longer than necessary. If you are waiting (and not in traffic), turn off your engine and restart only when you're ready to go.

- Remember, your vehicle does not require extended warm-up. After the engine has started, allow the engine to run for 10 to 20 seconds prior to placing the vehicle in gear. In very cold weather, however, give your engine a slightly longer warm-up period.
- Don't "lug" or "over-rev" the engine. Lugging is driving too slowly in a very high gear resulting in engine bucking. If this happens, shift to a lower gear. Over-revving is racing the engine beyond its safe limit. This can be avoided by shifting at the recommended speed.
- Use your air conditioning sparingly. The air conditioning system is operated by engine power so your fuel economy is reduced when you use it.
- Open windows at high speeds can reduce fuel economy.
- Fuel economy is reduced by cross-winds and headwinds. To help off-set some of this loss, slow down when driving in these conditions.

Keeping a vehicle in good operating condition is important both for economy and safety. Therefore, have an authorized K900 Kia dealer perform scheduled inspections and maintenance.

⚠ WARNING

■ Engine off during motion

Never turn the engine off to coast down hills or anytime the vehicle is in motion. The power steering and power brakes will not function properly without the engine running. In addition, turning off the ignition while driving could engage the steering wheel lock resulting in loss of vehicle steering. Keep the engine on and downshift to an appropriate gear for engine braking effect.

SPECIAL DRIVING CONDITIONS

Hazardous driving conditions

When hazardous driving conditions are encountered such as water, snow, ice, mud, sand, or similar hazards, follow these suggestions:

- Drive cautiously and allow extra distance for braking.
- Avoid sudden braking or steering.
- When braking with non-ABS brakes pump the brake pedal with a light up-and-down motion until the vehicle is stopped.

Do not pump the brake pedal on a vehicle equipped with ABS.

- If stalled in snow, mud, or sand, use second gear. Accelerate slowly to avoid spinning the drive wheels.
- Use sand, rock salt, tire chains, or other non-slip material under the drive wheels to provide traction when stalled in ice, snow, or mud.

⚠ WARNING

■ Downshifting

Do not downshift with an automatic transaxle while driving on slippery surfaces. The sudden change in tire speed could cause the tires to skid and result in an accident.

Rocking the vehicle

If it is necessary to rock the vehicle to free it from snow, sand, or mud, first turn the steering wheel right and left to clear the area around your front wheels. Then, shift back and forth between R (Reverse) and any forward gear in vehicles equipped with an automatic transaxle. Do not race the engine, and spin the wheels as little as possible. If you are still stuck after a few tries, have the vehicle pulled out by a tow vehicle to avoid engine overheating and possible damage to the transaxle.

The ESC system should be turned OFF prior to rocking the vehicle.

⚠ CAUTION

■ Vehicle rocking

Prolonged rocking may cause engine overheating, transaxle damage or failure, and tire damage.

⚠ CAUTION

■ Spinning tires

Do not spin the wheels, especially at speeds more than 35 mph (56 km/h). Spinning the wheels at high speeds when the vehicle is stationary could cause a tire to overheat which could result in tire damage.

⚠ WARNING

■ Sudden vehicle movement

Do not attempt to rock the vehicle if people or objects are nearby. The vehicle may suddenly move forward or backwards as it becomes unstuck.

Smooth cornering

OKH053210N

Avoid braking or gear changing in corners, especially when roads are wet. Ideally, corners should always be taken under gentle acceleration. If you follow these suggestions, tire wear will be held to a minimum.

Driving at night

OKH053211N

Because night driving presents more hazards than driving in the daylight, here are some important tips to remember:

- Slow down and keep more distance between you and other vehicles, as it may be more difficult to see at night, especially in areas where there may not be any street lights.

- Adjust your mirrors to reduce the glare from other driver's headlights.
- Keep your headlights clean and properly aimed on vehicles not equipped with the automatic headlight aiming feature. Dirty or improperly aimed headlights will make it much more difficult to see at night.
- Avoid staring directly at the headlights of oncoming vehicles. You could be temporarily blinded, and it will take several seconds for your eyes to readjust to the darkness.

Driving in the rain

OKH053093N

Rain and wet roads can make driving dangerous, especially if you're not prepared for the slick pavement. Here are a few things to consider when driving in the rain:

- A heavy rainfall will make it harder to see and will increase the distance needed to stop your vehicle, so slow down.
- Keep your windshield wiping equipment in good shape. Replace your windshield wiper blades when they show signs of streaking or missing areas on the windshield.
- If your tires are not in good condition, making a quick stop on wet pavement can cause a skid and possibly lead to an accident. Be sure your tires are in good shape.
- Turn on your headlights to make it easier for others to see you.
- Driving too fast through large puddles can affect your brakes. If you must go through puddles, try to drive through them slowly.
- If you believe you may have gotten your brakes wet, apply them lightly while driving until normal braking operation returns.

Driving in flooded areas

Avoid driving through flooded areas unless you are sure the water is no higher than the bottom of the wheel hub. Drive through any water slowly. Allow adequate stopping distance because brake performance may be affected.

After driving through water, dry the brakes by gently applying them several times while the vehicle is moving slowly.

Driving off-road

Drive carefully off-road because your vehicle may be damaged by rocks or roots of trees. Become familiar with the off-road conditions where you are going to drive before you begin driving.

Highway driving

Tires

Adjust the tire inflation pressures to specification. Low tire inflation pressures will result in overheating and possible failure of the tires.

Avoid using worn or damaged tires which may result in reduced traction or tire failure.

Never exceed the maximum tire inflation pressure shown on the tires.

⚠ WARNING

■ Tire tread

Always check the tire tread before driving your vehicle. Worn-out tires can result in loss of vehicle control. Worn-out tires should be replaced as soon as possible. For further information and tread limits, refer to "Tires and wheels" in section 7.

Fuel, engine coolant and engine oil

High speed travel consumes more fuel than urban motoring. Do not forget to check both the engine coolant and engine oil.

Drive belt

A loose or damaged drive belt may overheat the engine.

WINTER DRIVING

Severe weather conditions in the winter result in greater wear and other problems. To minimize the problems of winter driving, you should follow these suggestions:

Snowy or Icy conditions

To drive your vehicle in deep snow, it may be necessary to use snow tires or to install tire chains on your tires. If snow tires are needed, it is necessary to select tires equivalent in size and type of the original equipment tires. Failure to do so may adversely affect the safety and handling of your car. Furthermore, speeding, rapid acceleration, sudden brake applications, and sharp turns are potentially very hazardous practices.

During deceleration, use engine braking to the fullest extent. Sudden brake applications on snowy or icy roads may cause skids. You need to keep sufficient distance between the vehicle in operation in front and your vehicle. Also, apply the brake gently. It should be noted that installing tire chains on the tire will provide greater driving force, but will not prevent side skids.

Tire chains are not legal in all states. Check state laws before installing tire chains.

Snow tires

If you mount snow tires on your vehicle, make sure they are radial tires of the same size and load range as the original tires. Mount snow tires on all four wheels to balance your vehicle's handling in all weather conditions. Keep in mind that the traction provided by snow tires on dry roads may not be as high as your vehicle's original equipment tires. You should drive cautiously even when the roads are clear. Check with the tire dealer for maximum speed recommendations.

⚠ WARNING

■ Snow tire size

Snow tires should be equivalent in size and type to the vehicle's standard tires. Otherwise, the safety and handling of your vehicle may be adversely affected.

Do not install studded tires without first checking local, state and municipal regulations for possible restrictions against their use.

Tire chains

OKH053098N

Since the sidewalls of radial tires are thinner, they can be damaged by mounting some types of snow chains on them. Therefore, the use of snow tires is recommended instead of snow chains. Do not mount tire chains on vehicles equipped with aluminum wheels; snow chains may cause damage to the wheels. If snow chains must be used, use the AutoSock® (fabric snow chain). Damage to your vehicle caused by improper snow chain use is not covered by your vehicle manufacturers warranty.

Install the AutoSock® (fabric snow chain) only on the rear tires.

⚠ CAUTION

- **Make sure the AutoSock® (fabric snow chain) are the correct size and type for your tires. Incorrect snow chains can cause damage to the vehicle body and suspension and may not be covered by your vehicle manufacturer warranty.**
- **Always check the AutoSock® (fabric snow chain) installation for proper mounting after driving approximately 0.3 to 0.6 miles (0.5 to 1 km) to ensure safe mounting. Retighten or remount the AutoSock® (fabric snow chain) if they are loose.**

❉AutoSock® is a Registered trademark of AutoSock.

Chain installation

When installing the AutoSock® (fabric snow chain), follow the manufacturer's instructions and mount them as tightly as you can. Drive slowly with the AutoSock® (fabric snow chain) installed. If you hear the AutoSock® (fabric snow chain) contacting the body or chassis, stop and tighten them. If they still make contact, slow down until it stops. Remove the AutoSock® (fabric snow chain) as soon as you begin driving on cleared roads.

⚠ WARNING

■ Mounting chains

When mounting the AutoSock® (fabric snow chain), park the vehicle on level ground away from traffic. Turn on the vehicle Hazard Warning flashers and place a triangular emergency warning device behind the vehicle if available. Always place the vehicle in P (Park), apply the parking brake and turn off the engine before installing the AutoSock® (fabric snow chain).

⚠ WARNING

■ Tire chains

- **The use of the AutoSock® (fabric snow chain) may adversely affect vehicle handling.**
- **Do not exceed 20 mph (30 km/h) or the AutoSock® (fabric snow chain) manufacturer's recommended speed limit, whichever is lower.**
- **Drive carefully and avoid bumps, holes, sharp turns, and other road hazards, which may cause the vehicle to bounce.**
- **Avoid sharp turns or locked-wheel braking.**

⚠ CAUTION

- **The AutoSock® (fabric snow chain) that are the wrong size or improperly installed can damage your vehicle's brake lines, suspension, body and wheels.**
- **Stop driving and retighten the AutoSock® (fabric snow chain) any time you hear them hitting the vehicle.**

❊AutoSock® is a Registered trademark of AutoSock.

Use high quality ethylene glycol coolant

Your vehicle is delivered with high quality ethylene glycol coolant in the cooling system. It is the only type of coolant that should be used because it helps prevent corrosion in the cooling system, lubricates the water pump and prevents freezing. Be sure to replace or replenish your coolant in accordance with the maintenance schedule in section 7. Before winter, have your coolant tested to assure that its freezing point is sufficient for the temperatures anticipated during the winter.

Check battery and cables

Winter puts additional burdens on the battery system. Visually inspect the battery and cables as described in section 7. The level of charge in your battery can be checked by an authorized K900 Kia dealer or a service station.

Change to "winter weight" oil if necessary

In some climates it is recommended that a lower viscosity "winter weight" oil be used during cold weather. See section 8 for recommendations. If you aren't sure what weight oil you should use, consult an authorized K900 Kia dealer.

Check spark plugs and ignition system

Inspect your spark plugs as described in section 7 and replace them if necessary. Also check all ignition wiring and components to be sure they are not cracked, worn or damaged in any way.

To keep locks from freezing

To keep the locks from freezing, squirt an approved de-icer fluid or glycerine into the key opening. If a lock is covered with ice, squirt it with an approved de-icing fluid to remove the ice. If the lock is frozen internally, you may be able to thaw it out by using a heated key. Handle the heated key with care to avoid injury.

Use approved window washer anti-freeze in system

To keep the water in the window washer system from freezing, add an approved window washer anti-freeze solution in accordance with instructions on the container. Window washer anti-freeze is available from an authorized K900 Kia dealer and most auto parts outlets. Do not use engine coolant or other types of anti-freeze as these may damage the paint finish.

Don't let your parking brake freeze

Under some conditions your parking brake can freeze in the engaged position. This is most likely to happen when there is an accumulation of snow or ice around or near the rear brakes or if the brakes are wet. If there is a risk the parking brake may freeze, apply it only temporarily while you put the shift lever in P (Park) and block the rear wheels so the vehicle cannot roll. Then release the parking brake.

Don't let ice and snow accumulate underneath

Under some conditions, snow and ice can build up under the fenders and interfere with the steering. When driving in severe winter conditions where this may happen, you should periodically check underneath the car to be sure the movement of the front wheels and the steering components is not obstructed.

Carry emergency equipment

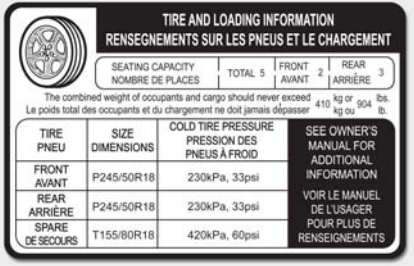
Depending on the severity of the weather you should carry appropriate emergency equipment. Some of the items you may want to carry include tire chains, tow straps or chains, flashlight, emergency flares, sand, a shovel, jumper cables, a window scraper, gloves, ground cloth, coveralls, a blanket, etc.

TRAILER TOWING

We do not recommend using this vehicle for trailer towing.

VEHICLE LOAD LIMIT

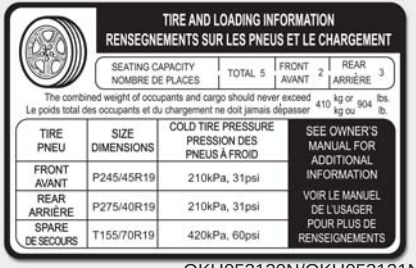
Tire and loading information label


TIRE AND LOADING INFORMATION
RENSEGNEMENTS SUR LES PNEUS ET LE CHARGEMENT

SEATING CAPACITY / NOMBRE DE PLACES	TOTAL 5	FRONT / AVANT 2	REAR / ARRIÈRE 3

The combined weight of occupants and cargo should never exceed 410 kg or kg ou 904 lbs. lb.
Le poids total des occupants et du chargement ne doit jamais dépasser

TIRE / PNEU	SIZE / DIMENSIONS	COLD TIRE PRESSURE / PRESSION DES PNEUS À FROID	SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION / VOIR LE MANUEL DE L'USAGER POUR PLUS DE RENSEIGNEMENTS
FRONT / AVANT	P245/50R18	230kPa, 33psi	
REAR / ARRIÈRE	P245/50R18	230kPa, 33psi	
SPARE / DE SECOURS	T155/80R18	420kPa, 60psi	


TIRE AND LOADING INFORMATION
RENSEGNEMENTS SUR LES PNEUS ET LE CHARGEMENT

SEATING CAPACITY / NOMBRE DE PLACES	TOTAL 5	FRONT / AVANT 2	REAR / ARRIÈRE 3

The combined weight of occupants and cargo should never exceed 410 kg or kg ou 904 lbs. lb.
Le poids total des occupants et du chargement ne doit jamais dépasser

TIRE / PNEU	SIZE / DIMENSIONS	COLD TIRE PRESSURE / PRESSION DES PNEUS À FROID	SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION / VOIR LE MANUEL DE L'USAGER POUR PLUS DE RENSEIGNEMENTS
FRONT / AVANT	P245/45R19	210kPa, 31psi	
REAR / ARRIÈRE	P275/40R19	210kPa, 31psi	
SPARE / DE SECOURS	T155/70R19	420kPa, 60psi	

OKH053120N/OKH053121N

The label located on the driver's door sill gives the original tire size, cold tire pressures recommended for your vehicle, the number of people that can be in your vehicle and vehicle capacity weight.

Vehicle capacity weight:

904 lbs. (410 kg)

Vehicle capacity weight is the maximum combined weight of occupants and cargo. If your vehicle is equipped with a trailer, the combined weight includes the tongue load.

Seating capacity:

Total : 5 persons
(Front seat : 2 persons,
Rear seat : 3 persons)

Seating capacity is the maximum number of occupants including a driver, your vehicle may carry.

However, the seating capacity may be reduced based upon the weight of all of the occupants, and the weight of the cargo being carried or towed.

Do not overload the vehicle as there is a limit to the total weight, or load limit including occupants and cargo, the vehicle can carry.

Towing capacity:

We do not recommend using this vehicle for trailer towing.

Cargo capacity:

The cargo capacity of your vehicle will increase or decrease depending on the weight and the number of occupants and the tongue load, if your vehicle is equipped with a trailer.

Steps For Determining Correct Load Limit -

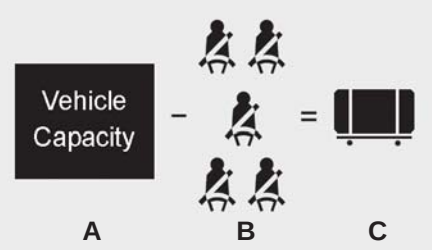
1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on your vehicle's placard.
2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
3. Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.
4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the "XXX" amount equals 1400 lbs. and there will be five 150 lbs. passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs.

   (1400-750 (5 x 150) = 650 lbs.)
5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.
6. If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

Example 1

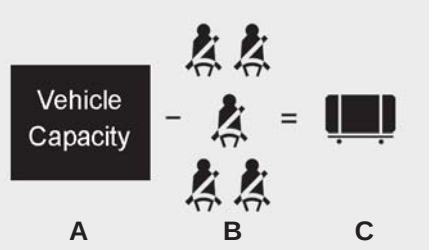
Item	Description	Total
A	Vehicle Capacity Weight	849 lbs (385 kg)
B	Subtract Occupant Weight 150 lbs (68 kg) × 2	300 lbs (136 kg)
C	Available Cargo and Luggage weight	549 lbs (249 kg)

Example 2



Item	Description	Total
A	Vehicle Capacity Weight	849 lbs (385 kg)
B	Subtract Occupant Weight 150 lbs (68 kg) × 5	750 lbs (340 kg)
C	Available Cargo and Luggage weight	99 lbs (45 kg)

Example 3



Item	Description	Total
A	Vehicle Capacity Weight	849 lbs (385 kg)
B	Subtract Occupant Weight 161 lbs (73 kg) × 5	805 lbs (365 kg)
C	Available Cargo and Luggage weight	44 lbs (20 kg)

Refer to your vehicle’s tire and loading information label for specific information about your vehicle's capacity weight and seating positions. The combined weight of the driver, passengers and cargo should never exceed your vehicle's capacity weight.

Certification label

OEN056020

The certification label is located on the driver's door sill at the center pillar.

This label shows the maximum allowable weight of the fully loaded vehicle. This is called the GVWR (Gross Vehicle Weight Rating). The GVWR includes the weight of the vehicle, all occupants, fuel and cargo.

This label also tells you the maximum weight that can be supported by the front and rear axles, called Gross Axle Weight Rating (GAWR).

To find out the actual loads on your front and rear axles, you need to go to a weigh station and weigh your vehicle. Your dealer can help you with this. Be sure to spread out your load equally on both sides of the centerline.

⚠ WARNING

■ Over loading

Never exceed the GVWR for your vehicle, the GAWR for either the front or rear axle and vehicle capacity weight. Exceeding these ratings can affect your vehicle's handling and braking ability.

The label will help you decide how much cargo and installed equipment your vehicle can carry.

If you carry items inside your vehicle - like suitcases, tools, packages, or anything else - they are moving as fast as the vehicle. If you have to stop or turn quickly, or if there is a crash, the items will keep going and can cause an injury if they strike the driver or a passenger.

⚠ WARNING

■ Over loading

Do not overload your vehicle. Overloading your vehicle can cause heat buildup in your vehicle's tires and possible tire failure, increased stopping distances and poor vehicle handling--all of which may result in a crash.

⚠ WARNING

■ Loose cargo

Do not travel with unsecured blunt objects in the passenger compartment of your vehicle (e.g. suit cases or unsecured child seats). These items may strike occupant during a sudden stop or crash.

✻ NOTICE

Overloading your vehicle may cause damage. Repairs would not be covered by your warranty. Do not overload your vehicle.

VEHICLE WEIGHT

This section will guide you in the proper loading of your vehicle and/or trailer, to keep your loaded vehicle weight within its design rating capability, with or without a trailer. Properly loading your vehicle will provide maximum return of the vehicle design performance. Before loading your vehicle, familiarize yourself with the following terms for determining your vehicle's weight ratings, with or without a trailer, from the vehicle's specifications and the compliance label:

Base curb weight

This is the weight of the vehicle including a full tank of fuel and all standard equipment. It does not include passengers, cargo, or optional equipment.

Vehicle curb weight

This is the weight of your new vehicle when you picked it up from your dealer plus any aftermarket equipment.

Cargo weight

This figure includes all weight added to the Base Curb Weight, including cargo and optional equipment.

GAW (Gross axle weight)

This is the total weight placed on each axle (front and rear) - including vehicle curb weight and all payload.

GAWR (Gross axle weight rating)

This is the maximum allowable weight that can be carried by a single axle (front or rear). These numbers are shown on the compliance label.

The total load on each axle must never exceed its GAWR.

GVW (Gross vehicle weight)

This is the Base Curb Weight plus actual Cargo Weight plus passengers.

GVWR (Gross vehicle weight rating)

This is the maximum allowable weight of the fully loaded vehicle (including all options, equipment, passengers and cargo). The GVWR is shown on the certification label located on the driver's door sill.

What to do in an emergency

Road warning.....6-2
- Hazard warning flasher.....6-2

In case of an emergency while driving.....6-3
- If the engine stalls at a crossroad or crossing.....6-3
- If you have a flat tire while driving.....6-3
- If engine stalls while driving.....6-3

If the engine will not start.....6-4
- If engine doesn't turn over or turns over slowly.....6-4
- If engine turns over normally but does not start.....6-4

Emergency starting.....6-5
- Jump starting.....6-5
- Push-starting.....6-8

If the engine overheats.....6-9

Tire Pressure Monitoring System (TPMS).....6-11
- Low tire pressure telltale.....6-12
- Low tire pressure position telltale.....6-12
- TPMS (Tire Pressure Monitoring System) malfunction indicator.....6-13
- Changing a tire with TPMS.....6-14

If you have a flat tire.....6-17
- Jack and tools.....6-17
- Removing and storing the spare tire.....6-18
- Changing tires.....6-18
- Jack label.....6-26

Towing.....6-27
- Towing service.....6-27
- Removable towing hook.....6-29
- Emergency towing.....6-30

ROAD WARNING

Hazard warning flasher

The hazard warning flasher serves as a warning to other drivers to exercise extreme caution when approaching, overtaking, or passing your vehicle.

It should be used whenever emergency repairs are being made or when the vehicle is stopped near the edge of a roadway.

Depress the flasher switch with the ignition switch in any position. The flasher switch is located in the center console switch panel. All turn signal lights will flash simultaneously.

- The hazard warning flasher operates whether your vehicle is running or not.
- The turn signals do not work when the hazard flasher is on.
- Care must be taken when using the hazard warning flasher while the vehicle is being towed.

IN CASE OF AN EMERGENCY WHILE DRIVING

If the engine stalls at a crossroad or crossing

If the engine stalls at a crossroad or crossing, set the shift lever in the N (Neutral) position and then push the vehicle to a safe place.

If you have a flat tire while driving

If a tire goes flat while you are driving:

1. Take your foot off the accelerator pedal and let the car slow down while driving straight ahead. Do not apply the brakes immediately or attempt to pull off the road as this may cause a loss of control. When the car has slowed to such a speed that it is safe to do so, brake carefully and pull off the road. Drive off the road as far as possible and park on firm, level ground. If you are on a divided highway, do not park in the median area between the two traffic lanes.
2. When the car is stopped, turn on your emergency hazard flashers, set the parking brake and put the shift lever in P.
3. Have all passengers get out of the car. Be sure they all get out on the side of the car that is away from traffic.
4. When changing a flat tire, follow the instruction provided later in this section.

If engine stalls while driving

1. Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place.
2. Turn on your emergency flashers.
3. Try to start the engine again. If your vehicle will not start, contact an authorized K900 Kia dealer or Kia Roadside Assistance.

IF THE ENGINE WILL NOT START

If engine doesn't turn over or turns over slowly

1. Be sure the shift lever is in N (Neutral) or P (Park) and the emergency brake is set.
2. Check the battery connections to be sure they are clean and tight.
3. Turn on the interior light. If the light dims or goes out when you operate the starter, the battery is discharged.
4. Check the starter connections to be sure they are securely tightened.
5. Do not push or pull the vehicle to start it. See instructions for "Jump starting".

⚠ WARNING

If the engine will not start, do not push or pull the car to start it. This could result in a collision or cause other damage.

If engine turns over normally but does not start

1. Check fuel level.
2. With the Engine Start/Stop Button in the OFF position, check all connectors at ignition coils and spark plugs. Reconnect any that may be disconnected or loose.
3. If the engine still does not start, call an authorized K900 Kia dealer or Kia Roadside Assistance.

EMERGENCY STARTING

OKH063024N

Connect cables in numerical order and disconnect in reverse order.

✻ NOTICE

Your vehicle has a battery in the trunk compartment, but when you jump start your vehicle, use the jumper terminal in the engine compartment.

Jump starting

Jump starting can be dangerous if done incorrectly. Therefore, to avoid harm to yourself or damage to your vehicle or battery, follow the jump starting procedures. If in doubt, we strongly recommend that you have a competent technician or towing service jump start your vehicle.

⚠ CAUTION

Use only a 12-volt jumper system. You can damage a 12-volt starting motor, ignition system, and other electrical parts beyond repair by use of a 24-volt power supply (either two 12-volt batteries in series or a 24-volt motor generator set).

⚠ WARNING

■ Battery

Never attempt to check the electrolyte level of the battery as this may cause the battery to rupture or explode causing serious injury.

⚠ WARNING

■ Battery

- **Keep all flames or sparks away from the battery. The battery produces hydrogen gas which may explode if exposed to flame or sparks.**

  If these instructions are not followed exactly, serious personal injury and damage to the vehicle may occur! If you are not sure how to follow this procedure, seek qualified assistance.

  (Continued)

(Continued)

Automobile batteries contain sulfuric acid. This is poisonous and highly corrosive. When jump starting, wear protective glasses and be careful not to get acid on yourself, your clothing or on the car.

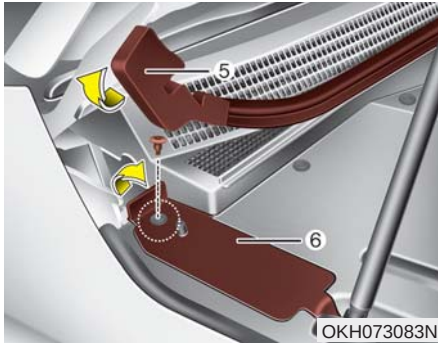
- **Do not attempt to jump start the vehicle if the discharged battery is frozen or if the electrolyte level is low; the battery may rupture or explode.**
- **Do not allow the (+) and (-) jumper cables to touch. It may cause sparks.**
- **The battery may rupture or explode when you jump start with a low or frozen battery.**

Jump starting procedure

✻ NOTICE

Your vehicle has a battery in the trunk compartment, but when you jump start your vehicle, use the jumper terminal in the engine compartment.

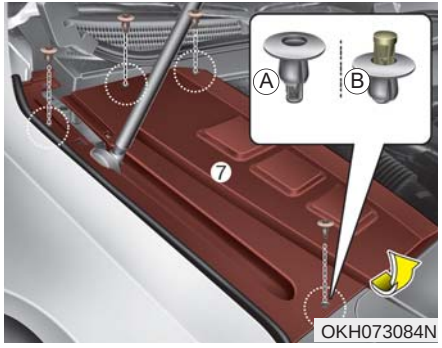
1. Make sure the booster battery is 12-volt and that its negative terminal is grounded.
2. If the booster battery is in another vehicle, do not allow the vehicles to touch.
3. Turn off all unnecessary electrical loads.
4. Open the engine hood.



5.Lift the end of strip (5) up.

6.Press the fastener head with screw driver and then pull the fastener out.

7.Lift the rear portion of small service cover (6) up and then remove the service cover.



(A) : for assemble, (B) : for remove

8.Press the fastener head with screw driver and then pull the fastener out from main service cover (7).

9.Pull the main service cover over 0.28 in (7 mm) to toward the front of the vehicle.

10. Lift the main service cover up and then remove the main service cover. Be careful not to damage the holder under the main service cover.

11. Connect the jumper cables in the exact sequence shown in the illustration. First connect one end of a jumper cable to the positive terminal of the jump start connector (1), then connect the other end to the positive terminal on the booster battery (2).

    Proceed to connect one end of the other jumper cable to the negative terminal of the booster battery (3), then the other end to the negative terminal of the jump start connector (4). Do not connect it to or near any part that moves when the engine is cranked.

    Do not allow the jumper cables to contact anything except the correct battery terminals or the correct ground. Do not lean over the battery when making connections.

⚠ CAUTION

■ Battery cables

Do not connect the jumper cable from the negative terminal of the booster battery to the negative terminal of the discharged battery. This can cause the discharged battery to overheat and crack, releasing battery acid.

12. Start the engine of the vehicle with the booster battery and let it run at 2,000 rpm, then start the engine of the vehicle with the discharged battery.

If the cause of your battery discharging is not apparent, have the system checked by an authorized K900 Kia dealer.

Push-starting

Vehicles equipped with automatic transmission cannot be push-started.

Follow the directions in this section for jump-starting.

⚠ WARNING

Never tow a vehicle to start it because the sudden surge forward when the engine starts could cause a collision with the tow vehicle.

IF THE ENGINE OVERHEATS

If your temperature gauge indicates overheating, you experience a loss of power, or hear loud pinging or knocking, the engine is probably too hot. If this happens, you should:

1. Pull off the road and stop as soon as it is safe to do so.
2. Place the shift lever in P and set the parking brake. If the air conditioning is on, turn it off.
3. If engine coolant is running out under the car or steam is coming out from the hood, stop the engine. Do not open the hood until the coolant has stopped running or the steaming has stopped. If there is no visible loss of engine coolant and no steam, leave the engine running and check to be sure the engine cooling fan is operating. If the fan is not running, turn the engine off.
4. Check to see if the water pump drive belt is missing. If it is not missing, check to see that it is tight. If the drive belt seems to be satisfactory, check for coolant leaking from the radiator, hoses or under the car. (If the air conditioning had been in use, it is normal for cold water to be draining from it when you stop.)

⚠ WARNING

While the engine is running, keep hair, hands and clothing away from moving parts such as the fan and drive belts to prevent injury.

5. If the water pump drive belt is broken or engine coolant is leaking out, stop the engine immediately and call the nearest authorized K900 Kia dealer for assistance.

⚠ WARNING

Do not remove the radiator cap when the engine is hot. This may result in coolant being blown out of the opening and cause serious burns.

6. If you cannot find the cause of the overheating, wait until the engine temperature has returned to normal. Then, if coolant has been lost, carefully add coolant to the reservoir to bring the fluid level in the reservoir up to the halfway mark.
7. Proceed with caution, keeping alert for further signs of overheating. If overheating happens again, call an authorized K900 Kia dealer for assistance.

⚠ CAUTION

- **Serious loss of coolant indicates there is a leak in the cooling system and this should be checked as soon as possible by an authorized K900 Kia dealer.**
- **When the engine overheats from low engine coolant, suddenly adding engine coolant may cause cracks in the engine. To prevent damage, add engine coolant slowly in small quantities.**

TIRE PRESSURE MONITORING SYSTEM (TPMS)

OKH063025N

■ Type A

■ Type B

OKH043415N

(1) Low Tire Pressure Telltale/TPMS Malfunction Indicator

(2) Low Tire Pressure Position Telltale (shown on the LCD display)

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a tire pressure monitoring system (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale.

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the low tire pressure telltale. When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists. When the TPMS malfunction indicator remains illuminated after blinking for approximately 1 minute, the system may not be able to detect or signal low tire pressure as intended. TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly.

Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.

✻ NOTICE

If any of the below happens, have the system be checked by an authorized K900 Kia dealer.

1. **The low tire pressure telltale/ TPMS malfunction indicator does not illuminate for 3 seconds when the ignition switch is turned to the ON or engine is running.**
2. **The TPMS malfunction indicator remains illuminated after blinking for approximately 1 minute.**
3. **The Low tire pressure position telltale remains illuminated.**

Low tire pressure telltale

Low tire pressure position telltale

■ Type A

■ Type B

OKH043415N

When the tire pressure monitoring system warning indicators are illuminated and warning massage displayed on the cluster LCD display, one or more of your tires is significantly under-inflated. The low tire pressure position telltale light will indicate which tire is significantly under-inflated by illuminating the corresponding position light.

If either telltale illuminates, immediately reduce your speed, avoid hard cornering and anticipate increased stopping distances. You should stop and check your tires as soon as possible. Inflate the tires to the proper pressure as indicated on the vehicle's placard or tire inflation pressure label located on the driver's side center pillar outer panel.

If you cannot reach a service station or if the tire cannot hold the newly added air, replace the low pressure tire with the spare tire.

If you drive the vehicle for about 20 minutes at speeds above 15 mph (25 km/h) after replacing the low pressure tire with the spare tire, the below will happen:

- The TPMS malfunction indicator may blink for approximately 1 minute and then remain continuously illuminated because the TPMS sensor is not mounted on the spare wheel.

✻ NOTICE

The spare tire is not equipped with a tire pressure sensor.

⚠ CAUTION

In winter or cold weather, the low tire pressure telltale may be illuminated if the tire pressure was adjusted to the recommended tire inflation pressure in warm weather. It does not mean your TPMS is malfunctioning because the decreased temperature leads to a proportional lowering of tire pressure.

When you drive your vehicle from a warm area to a cold area or from a cold area to a warm area, or the outside temperature is greatly higher or lower, you should check the tire inflation pressure and adjust the tires to the recommended tire inflation pressure.

⚠ WARNING

■ Low pressure damage

Significantly low tire pressure makes the vehicle unstable and can contribute to loss of vehicle control and increased braking distances.

Continued driving on low pressure tires can cause the tires to overheat and fail.

TPMS (Tire Pressure Monitoring System) malfunction indicator

The TPMS malfunction indicator will illuminate after it blinks for approximately one minute when there is a problem with the Tire Pressure Monitoring System.

Have the system checked by an authorized K900 Kia dealer as soon as possible to determine the cause of the problem.

✻ NOTICE

If there is a malfunction with the TPMS, the low tire pressure position telltale will not be displayed even though the vehicle has an underinflated tire.

⚠ CAUTION

- **The TPMS malfunction indicator may blink for approximately 1 minute and then remain continuously illuminated if the vehicle is moving around electric power supply cables or radio transmitter such as at police stations, government and public offices, broadcasting stations, military installations, airports, or transmitting towers, etc. This can interfere with normal operation of the Tire Pressure Monitoring System (TPMS).**
- **The TPMS malfunction indicator may blink for approximately 1 minute and then remain continuously illuminated if the snow chains are used or some separate electronic devices such as notebook computer, mobile charger, remote starter or navigation etc., are used in the vehicle. This can interfere with normal operation of the Tire Pressure Monitoring System (TPMS).**

Changing a tire with TPMS

If you have a flat tire, the Low Tire Pressure and Position telltales will come on. Have the flat tire repaired by an authorized K900 Kia dealer as soon as possible or replace the flat tire with the spare tire.

⚠ CAUTION

Never use a puncture-repairing agent not approved by K900 Kia dealer to repair and/or inflate a low pressure tire. Tire sealant not approved by K900 Kia dealer may damage the tire pressure sensor.

Each wheel is equipped with a tire pressure sensor mounted inside the tire behind the valve stem. You must use TPMS specific wheels. It is recommended that you always have your tires serviced by an authorized K900 Kia dealer.

If you drive the vehicle for about 20 minutes at speeds above 15 mph (25 km/h) after replacing the low pressure tire with the spare tire, the below will happen:

- The TPMS malfunction indicator may blink for approximately 1 minute and then remain continuously illuminated because the TPMS sensor is not mounted on the spare wheel.

You may not be able to identify a tire with low pressure by simply looking at it. Always use a good quality tire pressure gauge to measure. Please note that a tire that is hot (from being driven) will have a higher pressure measurement than a tire that is cold.

A cold tire means the vehicle has been sitting for 3 hours and driven for less than 1 mile (1.6 km) in that 3 hour period.

Allow the tire to cool before measuring the inflation pressure. Always be sure the tire is cold before inflating to the recommended pressure.

⚠ WARNING

■ TPMS

- **The TPMS cannot alert you to severe and sudden tire damage caused by external factors such as nails or road debris.**
- **If you feel any vehicle instability, immediately take your foot off the accelerator, apply the brakes gradually with light force, and slowly move to a safe position off the road.**

⚠ WARNING

■ Protecting TPMS

Tampering with, modifying, or disabling the Tire Pressure Monitoring System (TPMS) components may interfere with the system's ability to warn the driver of low tire pressure conditions and/or TPMS malfunctions. Tampering with, modifying, or disabling the Tire Pressure Monitoring System (TPMS) components may void the warranty for that portion of the vehicle.

Pursuant to Code of Federal Regulations, Title 47, Part 15 ("FCC Rules").

Operation is subject to the following two conditions:

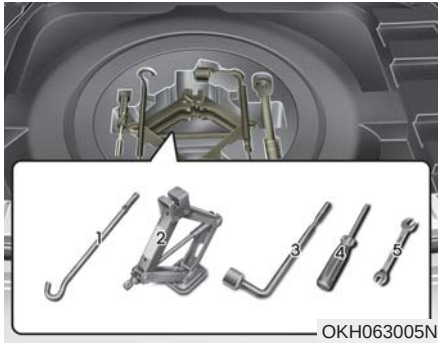
1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

⚠ CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

IF YOU HAVE A FLAT TIRE

Jack and tools



OKH063005N

The jack, jack handle, and wheel lug nut wrench are stored in the luggage compartment. Pull up the luggage box cover to reach this equipment.

(1) Jack handle
(2) Jack
(3) Wheel lug nut wrench
(4) Screw driver
(phillips and flat-head)
(5) Spanner

Jacking instructions

The jack is provided for emergency tire changing only.

To prevent the jack from “rattling” while the vehicle is in motion, store it properly.

Follow jacking instructions to reduce the possibility of personal injury.

⚠ WARNING

■ Changing tires

- **Never attempt vehicle repairs in the traffic lanes of a public road or highway.**
- **Always move the vehicle completely off the road and onto the shoulder before trying to change a tire. The jack should be used on level firm ground. If you cannot find a firm, level place off the road, call a towing service company for assistance.**

(Continued)

(Continued)

- **Be sure to use the correct front and rear jacking positions on the vehicle; never use the bumpers or any other part of the vehicle for jack support.**
- **The vehicle can easily roll off the jack causing serious injury or death. No person should place any portion of their body under a vehicle that is supported only by a jack; use vehicle support stands.**
- **Do not start or run the engine while the vehicle is on the jack.**
- **Do not allow anyone to remain in the vehicle while it is on the jack.**
- **Make sure any children present are in a secure place away from the road and from the vehicle to be raised with the jack.**

Removing and storing the spare tire

OKH063006N

Turn the tire hold-down wing bolt counterclockwise.

Store the tire in the reverse order of removal.

To prevent the spare tire and tools from “rattling” while the vehicle is in motion, store them properly.

⚠ CAUTION

When you remove or store the spare tire, do not contact or bump the battery with the spare tire. Contacting or bumping the battery may cause failure of electrical circuits.

Changing tires

OKH063003N

1. Park on a level surface and apply the parking brake firmly.
2. Shift the shift lever into P (Park).
3. Activate the hazard warning flasher.

OKH063008N

4. Remove the wheel lug nut wrench, jack, jack handle, and spare tire from the vehicle.
5. Block both the front and rear of the wheel that is diagonally opposite the jack position.

⚠ WARNING

■ Changing a tire

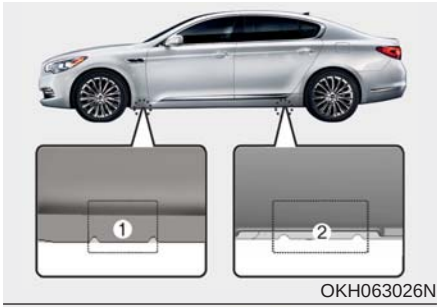
- **To prevent vehicle movement while changing a tire, always set the parking brake fully, and always block the wheel diagonally opposite the wheel being changed.**
- **We recommend that the wheels of the vehicle be blocked, and that no person remain in a vehicle that is being jacked.**

OKH063009N

6. Insert the screwdriver into the groove of the wheel cap and pry gently to remove the wheel cap.

OKH063010N

7. Loosen the wheel lug nuts counter-clockwise one turn each in sequence of number, but do not remove any nut until the tire has been raised off the ground.



OKH063026N

OKH063011N

8. Place the jack at the front (1) or rear (2) jacking position closest to the tire you are changing. Place the jack at the designated locations under the frame. The jacking positions are plates welded to the frame with two tabs and a raised dot to index with the jack.

⚠ WARNING

■ Jack location

To reduce the possibility of injury, be sure to use only the jack provided with the vehicle and in the correct jack position; never use any other part of the vehicle for jack support.

⚠ CAUTION

Place the jack not to damage to the plastic guard. If you place the jack at the plastic guard and jack up the vehicle, the plastic guard may be damaged.

OKH063012N

9. Insert the jack handle into the jack and turn it clockwise, raising the vehicle until the tire just clears the ground. This measurement is approximately 1.2 in (30 mm).

   Before removing the wheel lug nuts, make sure the vehicle is stable and that there is no chance for movement or slippage.

10. Loosen the wheel nuts and remove them with your fingers. Slide the wheel off the studs and lay it flat so it cannot roll away. To put the wheel on the hub, pick up the spare tire, line up the holes with the studs and slide the wheel onto them. If this is difficult, tip the wheel slightly and get the top hole in the wheel lined up with the top stud. Then jiggle the wheel back and forth until the wheel can be slid over the other studs.

⚠ WARNING

Wheels may have sharp edges. Handle them carefully to avoid possible severe injury. Before putting the wheel into place, be sure that there is nothing on the hub or wheel (such as mud, tar, gravel, etc.) that prevents the wheel from fitting solidly against the hub.

If there is, remove it. If there is not good contact on the mounting surface between the wheel and hub, the wheel nuts could come loose and cause the loss of a wheel. Loss of a wheel may result in loss of control of the vehicle. This may cause serious injury or death.

11. To reinstall the wheel, hold it on the studs, put the wheel nuts on the studs and tighten them finger tight. The nuts should be installed with their tapered small diameter ends directed inward. Jiggle the tire to be sure it is completely seated, then tighten the nuts as much as possible with your fingers again.
12. Lower the vehicle to the ground by turning the wheel nut wrench counterclockwise.

OKH063013N

Then position the wrench as shown in the drawing and tighten the wheel nuts. Be sure the socket is seated completely over the nut. Do not stand on the wrench handle or use an extension pipe over the wrench handle. Go around the wheel tightening every other nut until they are all tight. Then double-check each nut for tightness. After changing wheels, have an authorized K900 Kia dealer tighten the wheel nuts to their proper torque as soon as possible.

Wheel nut tightening torque:

Steel wheel & aluminum alloy wheel:

65~79 lb·ft (9~11 kg·m)

If you have a tire gauge, remove the valve cap and check the air pressure. If the pressure is lower than recommended, drive slowly to the nearest service station and inflate to the correct pressure. If it is too high, adjust it until it is correct. Always reinstall the valve cap after checking or adjusting tire pressure. If the cap is not replaced, air may leak from the tire. If you lose a valve cap, buy another and install it as soon as possible.

After you have changed wheels, always secure the flat tire in its place and return the jack and tools to their proper storage locations.

⚠ CAUTION

Your vehicle has metric threads on the wheel studs and nuts. Make certain during wheel removal that the same nuts that were removed are reinstalled - or, if replaced, that nuts with metric threads and the same chamfer configuration are used. Installation of a non-metric thread nut on a metric stud or vice-versa will not secure the wheel to the hub properly and will damage the stud so that it must be replaced.

Note that most lug nuts do not have metric threads. Be sure to use extreme care in checking for thread style before installing aftermarket lug nuts or wheels. If in doubt, consult an authorized K900 Kia dealer.

⚠ WARNING

■ Wheel studs

If the studs are damaged, they may lose their ability to retain the wheel. This could lead to the loss of the wheel and a collision resulting in serious injuries.

To prevent the jack, jack handle, wheel lug nut wrench and spare tire from rattling while the vehicle is in motion, store them properly.

⚠ WARNING

■ Inadequate spare tire pressure

Check the inflation pressures as soon as possible after installing the spare tire. Adjust it to the specified pressure, if necessary. Refer to "Tires and wheels" section 8.

Important - use of compact spare tire

Your vehicle is equipped with a compact spare tire. This compact spare tire takes up less space than a regular-size tire. This tire is smaller than a conventional tire and is designed for temporary use only.

⚠ CAUTION

- **You should drive carefully when the compact spare is in use. The compact spare should be replaced by the proper conventional tire and rim at the first opportunity.**
- **The operation of this vehicle is not recommended with more than one compact spare tire in use at the same time.**

⚠ WARNING

The compact spare tire is for emergency use only. Do not operate your vehicle on this compact spare at speeds over 50 mph (80 km/h). The original tire should be repaired or replaced as soon as is possible to avoid failure of the spare possibly leading to personal injury or death.

The compact spare should be inflated to 60 psi (420 kPa).

✻ NOTICE

Check the inflation pressure after installing the spare tire. Adjust it to the specified pressure, as necessary.

When using a compact spare tire, observe the following precautions:

- Under no circumstances should you exceed 50 mph (80 km/h); a higher speed could damage the tire.
- Ensure that you drive slowly enough for the road conditions to avoid all hazards. Any road hazard, such as a pothole or debris, could seriously damage the compact spare.
- Any continuous road use of this tire could result in tire failure, loss of vehicle control, and possible personal injury.
- Do not exceed the vehicle's maximum load rating or the load-carrying capacity shown on the sidewall of the compact spare tire.
- Avoid driving over obstacles. The compact spare tire diameter is smaller than the diameter of a conventional tire and reduces the ground clearance approximately 1 inch (25 mm), which could result in damage to the vehicle.
- Do not take this vehicle through an automatic car wash while the compact spare tire is installed.
- Do not use tire chains on the compact spare tire. Because of the smaller size, a tire chain will not fit properly. This could damage the vehicle and result in loss of the chain.
- Do not use the compact spare tire on any other vehicle because this tire has been designed especially for your vehicle.
- The compact spare tire's tread life is shorter than a regular tire. Inspect your compact spare tire regularly and replace worn compact spare tires with the same size and design, mounted on the same wheel.

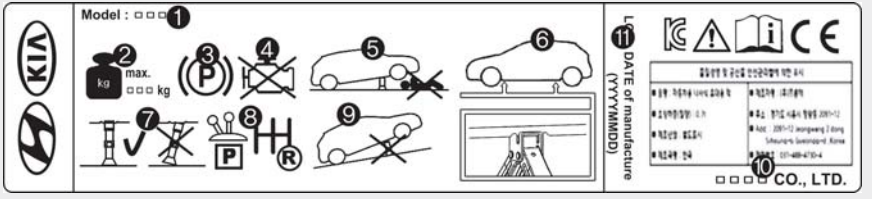
- The compact spare tire should not be used on any other wheels, nor should standard tires, snow tires, wheel covers or trim rings be used with the compact spare wheel. If such use is attempted, damage to these items or other car components may occur.
- Do not use more than one compact spare tire at a time.
- Do not tow a trailer while the compact spare tire is installed.

⚠ CAUTION

When the original tire and wheel are repaired and reinstalled on the vehicle, the wheel nut torque must be set correctly to prevent wheel vibration. The correct wheel nut tightening torque is 65~79 lb-ft (9~11 kg.m).

Jack label

■ Example
■ Type A



OHYK064001

■ Type B

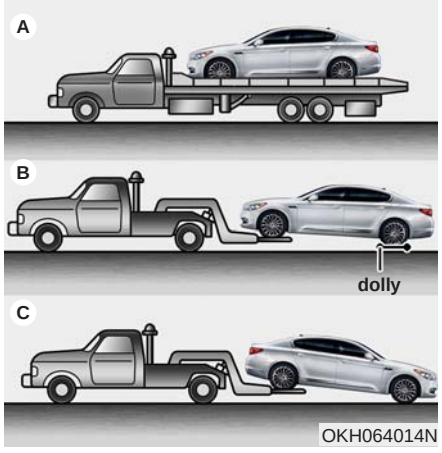
OHYK064002

❊ The actual Jack label in the vehicle may differ from the illustration. For more detailed specifications, refer to the label attached to the jack.

1. Model Name
2. Maximum allowable load
3. When using the jack, set your parking brake.
4. When using the jack, stop the engine.
5. Do not get under a vehicle that is supported by a jack.
6. The designated locations under the frame
7. When supporting the vehicle, the base plate of jack must be vertical under the lifting point.
8. Shift into Reverse gear on vehicles with manual transmission or move the shift lever to the P position on vehicles with automatic transmission.
9. The jack should be used on firm level ground.
10. Jack manufacture
11. Production date

TOWING

Towing service



If emergency towing is necessary, we recommend having it done by an authorized K900 Kia dealer or a commercial tow-truck service. Proper lifting and towing procedures are necessary to prevent damage to the vehicle. The use of wheel dollies or flatbed is recommended.

It is acceptable to tow the vehicle with the front wheels on the ground (without dollies) and the rear wheels off the ground.

If any of the loaded wheels or suspension components are damaged or the vehicle is being towed with the rear wheels on the ground, use a towing dolly under the rear wheels.

When being towed by a commercial tow truck and wheel dollies are not used, the rear of the vehicle should always be lifted, not the front.

- Ensure any metal parts on the tie-down straps do not contact painted surfaces or the face of the wheels.
- Do not place straps over the body panels or through the wheels.

⚠ CAUTION

Attaching straps to the chasis, suspension or other parts of the body can cause damage.

OKH063016N

OKH063015N

⚠ CAUTION

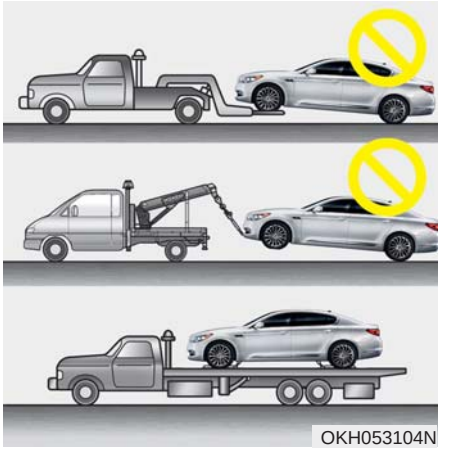
- **Do not tow the vehicle with the rear wheels on the ground as this may cause damage to the vehicle.**
- **Do not tow with sling-type equipment. Use wheel lift or flatbed equipment.**

When towing your vehicle in an emergency without wheel dollies :

1. Set the Engine Start/Stop Button in the ACC position.
2. Place the shift lever in N (Neutral).
3. Release the parking brake.

⚠ CAUTION

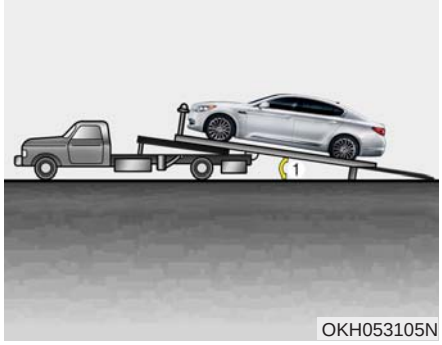
Failure to place the shift lever in N (Neutral) may cause internal damage to the transaxle.



OKH053104N

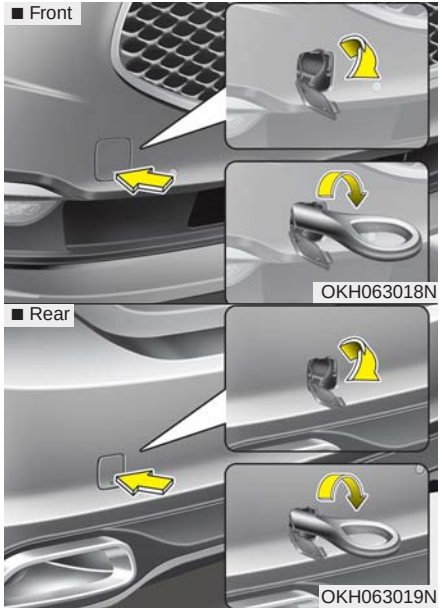
⚠ CAUTION

If the ECS malfunction indicator illuminates when there is no air in the suspension, the vehicle height will be very low, so do not drive the vehicle to protect it from projections on the ground. Take your vehicle to an authorized K900 Kia dealer by towing the vehicle and have the system checked. You should tow the vehicle as shown the picture.



When you load the vehicle onto the tow truck, the loading angle(1) should be smaller than 6°.

Removable towing hook (if equipped)



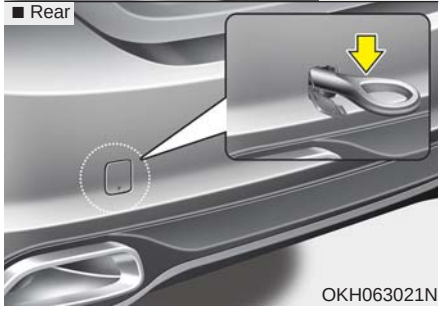
1. Open the trunk, and remove the towing hook from the tool case.
2. Remove the hole cover by pressing the lower part of the cover on the front or rear bumper.
3. Install the towing hook by turning it clockwise into the hole until it is fully secured.
4. Remove the towing hook and install the cover after use.

Emergency towing

■ Front

OKH063020N

■ Rear



OKH063021N

If towing is necessary, have it done by an authorized K900 Kia dealer or a commercial tow truck service.

If towing service is not available in an emergency, your vehicle may be temporarily towed using a cable or chain secured to the emergency towing hook under the front (or rear) of the vehicle. Use extreme caution when towing the vehicle. A driver must be in the vehicle to steer it and operate the brakes.

Towing in this manner may be done only on hard-surfaced roads for a short distance and at low speeds. Also, the wheels, axles, power train, steering and brakes must all be in good condition.

- Do not use the tow hooks to pull a vehicle out of mud, sand or other conditions from which the vehicle cannot be driven out under its own power.
- Avoid towing a vehicle heavier than the vehicle doing the towing.
- The drivers of both vehicles should communicate with each other frequently.

⚠ CAUTION

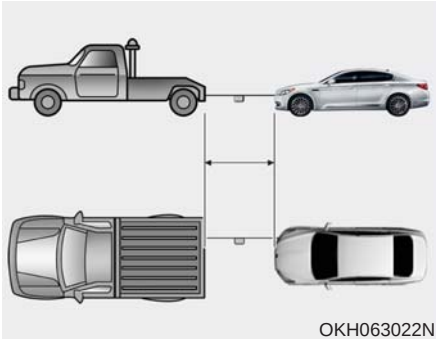
- **Attach a towing strap to the tow hook.**
- **Using a portion of the vehicle other than the tow hooks for towing may damage the body of your vehicle.**
- **Use only a cable or chain specifically intended for use in towing vehicles. Securely fasten the cable or chain to the towing hook provided.**

- Before emergency towing, check that the hook is not broken or damaged.
- Fasten the towing cable or chain securely to the hook.
- Do not jerk the hook. Apply steady and even force.
- To avoid damaging the hook, do not pull from the side or at a vertical angle. Always pull straight ahead.

⚠ WARNING

Use extreme caution when towing the vehicle.

- **Avoid sudden starts or erratic driving maneuvers which would place excessive stress on the emergency towing hook and towing cable or chain. The hook and towing cable or chain may break and cause serious injury or damage.**
- **If the disabled vehicle cannot be moved, do not forcibly continue the towing. Contact an authorized K900 Kia dealer or a commercial tow truck service for assistance.**
- **Tow the vehicle as straight ahead as possible.**
- **Keep away from the vehicle during towing.**



OKH063022N

- Use a towing strap less than 16 feet (5 m) long. Attach a white or red cloth (about 12 inches (30 cm) wide) in the middle of the strap for easy visibility.
- Drive carefully so that the towing strap is not loosened during towing.

✻ NOTICE

Emergency towing is not legal in all states. Contact an authorized K900 Kia dealer and tow the vehicle.

Emergency towing precautions

- Place the transaxle shift lever in N (Neutral).
- Release the parking brake.
- Press the brake pedal with more force than normal since you will have reduced brake performance.
- More steering effort will be required because the power steering system will be disabled.
- If you are driving down a long hill, the brakes may overheat and brake performance will be reduced. Stop often and let the brakes cool off.

⚠ CAUTION

■ Automatic transmission

- **If the car is being towed with all four wheels on the ground, it can be towed only from the front. Be sure that the transmission is in neutral. Be sure the steering is unlocked by placing the Engine Start/Stop Button in the ACC position. A driver must be in the towed vehicle to operate the steering and brakes.**
- **To avoid serious damage to the automatic transmission, limit the vehicle speed to 10 mph (15 km/h) and drive less than 1 mile (1.5 km) when towing.**
- **Before towing, check the automatic transmission for fluid leaks under your vehicle. If the automatic transmission fluid is leaking, flatbed equipment or a towing dolly must be used.**

Maintenance

Engine compartment 7-3
Maintenance services 7-5
• Owner's responsibility 7-5
• Owner maintenance precautions 7-6
Owner maintenance 7-8
• Owner maintenance schedule 7-8
Scheduled maintenance service 7-10
• Normal maintenance schedule 7-11
• Maintenance under severe usage conditions 7-27
Explanation of scheduled maintenance items .. 7-29
Engine oil 7-32
• Checking the engine oil level 7-32
• Changing the engine oil and filter 7-33
Engine coolant 7-34
• Checking the coolant level 7-34
• Changing the coolant 7-36
Brake fluid 7-37
• Checking the brake fluid level 7-37
Power steering fluid 7-38
• Checking the power steering fluid level 7-38
• Checking the power steering hose 7-38
Washer fluid 7-39
• Checking the washer fluid level 7-39
Air cleaner 7-40
• Filter replacement 7-40
Climate control air filter 7-43
• Filter inspection 7-43
• Filter replacement 7-43
Wiper blades 7-45
• Blade inspection 7-45
• Blade replacement 7-45
Battery 7-48
• For best battery service 7-48
• Battery recharging by battery charger 7-50
• Battery recharging by vehicle 7-50
• Reset items 7-52
Tires and wheels 7-53
• Tire care 7-53
• Recommended cold tire inflation pressures 7-53
• Checking tire inflation pressure 7-54
• Tire rotation 7-55
• Wheel alignment and tire balance 7-56
• Tire replacement 7-57
• Wheel replacement 7-58
• Tire traction 7-58
• Tire maintenance 7-58
• Tire sidewall labeling 7-59
• Low aspect ratio tire 7-63

- Tire terminology and definitions 7-64
- All season tires 7-66
- Summer tires 7-66
- Snow tires.....7-66
- Tire chains.....7-67
- Radial-ply tires 7-67

Fuses 7-68
- Instrument panel fuse replacement.....7-69
- Engine compartment fuse replacement 7-71
- Fuse/relay panel description 7-73

Light bulbs 7-87
- Front light bulb.....7-88
- Side repeater light bulb replacement 7-90
- Rear combination light bulb replacement.....7-90
- High mounted stop light 7-91
- License plate lamp replacement 7-91
- Interior light bulb replacement.....7-92

Appearance care 7-93
- Exterior care.....7-93
- Interior care.....7-99

Emission control system.....7-100
- Crankcase emission control system.....7-100
- Evaporative emission control (including orvr: Onboard refueling vapor recovery) system.....7-100
- Exhaust emission control system.....7-101

California perchlorate notice 7-104

ENGINE COMPARTMENT

■ 3.8L Engine

1. Engine oil dipstick
2. Engine oil filler cap
3. Engine coolant reservoir
4. Radiator cap
5. Brake fluid reservoir
6. Power steering fluid reservoir
7. Windshield washer fluid reservoir
8. Air cleaner
9. Fuse box
10. Jumper terminal

❉ The actual engine compartment in the vehicle may differ from the illustration.
❉ The battery is in the trunk.

OKH013007N

■ **5.0L Engine**

1. Engine coolant reservoir
2. Radiator cap
3. Brake fluid reservoir
4. Air cleaner
5. Engine oil dipstick
6. Engine oil filler cap
7. Windshield washer fluid reservoir
8. Fuse box
9. Power steering fluid reservoir
10. Jumper terminal

❊ The actual engine compartment in the vehicle may differ from the illustration.
❊ The battery is in the trunk.

OKH013006N

MAINTENANCE SERVICES

You should exercise the utmost care to prevent damage to your vehicle and injury to yourself whenever performing any maintenance or inspection procedures.

Should you have any doubts concerning the inspection or servicing of your vehicle, we strongly recommend that you have an authorized K900 Kia dealer perform this work.

An authorized K900 Kia dealer has factory-trained technicians and genuine Kia parts to service your vehicle properly. For expert advice and quality service, see an authorized K900 Kia dealer.

Inadequate, incomplete or insufficient servicing may result in operational problems with your vehicle that could lead to vehicle damage, an accident, or personal injury.

Owner's responsibility

✻ NOTICE

Maintenance Service and Record Retention are the owner's responsibility.

You should retain documents that show proper maintenance has been performed on your vehicle in accordance with the scheduled maintenance service charts shown on the following pages. You need this information to establish your compliance with the servicing and maintenance requirements of your vehicle warranties.
Detailed warranty information is provided in your Service Passport.
Repairs and adjustments required as a result of improper maintenance or a lack of required maintenance are not covered.
We recommend you have your vehicle maintained and repaired by an authorized K900 Kia dealer.

An authorized K900 Kia dealer meets Kia's high service quality standards and receives technical support from Kia in order to provide you with a high level of service satisfaction.

Owner maintenance precautions

Improper or incomplete service may result in problems. This section gives instructions only for the maintenance items that are easy to perform.

As explained earlier in this section, several procedures can be done only by an authorized K900 Kia dealer with special tools.

✻ NOTICE

Improper owner maintenance during the warranty period may affect warranty coverage. For details, read the separate Warranty & Maintenance book provided with the vehicle. If you're unsure about any servicing or maintenance procedure, have it done by an authorized K900 Kia dealer.

⚠ WARNING

■ Maintenance work

- **Performing maintenance work on a vehicle can be dangerous. You can be seriously injured while performing some maintenance procedures. If you lack sufficient knowledge and experience or the proper tools and equipment to do the work, have it done by an authorized K900 Kia dealer.**
- **Working under the hood with the engine running is dangerous. It becomes even more dangerous when you wear jewelry or loose clothing. These can become entangled in moving parts and result in injury.**

(Continued)

(Continued)

Therefore, if you must run the engine while working under the hood, make certain that you remove all jewelry (especially rings, bracelets, watches, and necklaces) and all neckties, scarves, and similar loose clothing before getting near the engine or cooling fans.

⚠ CAUTION

- **Do not put heavy objects or apply excessive force on top of the engine cover (if equipped) or fuel related parts.**
- **When you inspect the fuel system (fuel lines and fuel injection devices), we recommend that you contact an authorized K900 Kia dealer.**
- **Do not drive long time with the engine cover (if equipped) removed.**
- **When checking the engine room, do not go near fire.**
- **Fuel, washer fluid, etc. are flammable oils that may cause fire.**
- **Before touching the battery, ignition cables and electrical wiring, you should disconnect the battery "-" terminal. You may get an electric shock from the electric current.**

(Continued)

(Continued)

- **When you remove the interior trim cover with a flat head (-) driver, be careful not to damage the cover.**
- **Be careful when you replace and clean bulbs to avoid burns or electrical shock.**

OWNER MAINTENANCE

The following lists are vehicle checks and inspections that should be performed by the owner or an authorized K900 Kia dealer at the frequencies indicated to help ensure safe, dependable operation of your vehicle.

Any adverse conditions should be brought to the attention of your dealer as soon as possible.

These Owner Maintenance Checks are generally not covered by warranties and you may be charged for labor, parts and lubricants used.

Owner maintenance schedule

When you stop for fuel:

- Check the engine oil level.
- Check coolant level in coolant reservoir.
- Check the windshield washer fluid level.
- Look for low or under-inflated tires.

⚠ WARNING

Be careful when checking your engine coolant level when the engine is hot. Scalding hot coolant and steam may blow out under pressure. This could cause burns or other serious injury.

While operating your vehicle:

- Note any changes in the sound of the exhaust or any smell of exhaust fumes in the vehicle.
- Check for vibrations in the steering wheel. Notice any increased steering effort or looseness in the steering wheel, or change in its straight-ahead position.
- Notice if your vehicle constantly turns slightly or “pulls” to one side when traveling on smooth, level road.
- When stopping, listen and check for unusual sounds, pulling to one side, increased brake pedal travel or “hard-to-push” brake pedal.
- If any slipping or changes in the operation of your transmission occurs, check the transmission fluid level.
- Check automatic transmission P (Park) function.
- Check parking brake.
- Check for fluid leaks under your vehicle (water dripping from the air conditioning system during or after use is normal).

At least monthly:

- Check coolant level in the engine coolant reservoir.
- Check the operation of all exterior lights, including the stoplights, turn signals and hazard warning flashers.
- Check the inflation pressures of all tires including the spare.

At least twice a year (i.e., every Spring and Fall):

- Check radiator, heater and air conditioning hoses for leaks or damage.
- Check windshield washer spray and wiper operation. Clean wiper blades with clean cloth dampened with washer fluid.
- Check headlight alignment.
- Check muffler, exhaust pipes, shields and clamps.
- Check the lap/shoulder belts for wear and function.
- Check for worn tires and loose wheel lug nuts.

At least once a year:

- Clean body and door drain holes.
- Lubricate door hinges and checks, and hood hinges.
- Lubricate door and hood locks and latches.
- Lubricate door rubber weatherstrips.
- Check the air conditioning system.
- Check the power steering fluid level.
- Inspect and lubricate automatic transmission linkage and controls.
- Clean battery and terminals.
- Check the brake fluid level.

SCHEDULED MAINTENANCE SERVICE

Follow Normal Maintenance Schedule if the vehicle is usually operated where none of the following conditions apply. If any of the following conditions apply, follow Maintenance Under Severe Usage Conditions.

- Repeated short distance driving.
- Driving in dusty conditions or sandy areas.
- Extensive use of brakes.
- Driving in areas where salt or other corrosive materials are being used.
- Driving on rough or muddy roads.
- Driving in mountainous areas.
- Extended periods of idling or low speed operation.
- Driving for a prolonged period in cold temperatures and/or extremely humid climates.
- More than 50% driving in heavy city traffic during hot weather above 90°F (32°C).

If your vehicle is operated under the above conditions, you should inspect, replace or refill more frequently than the following Normal Maintenance Schedule. After 120 months or 150,000 miles (240,000 km) continue to follow the prescribed maintenance intervals.

NORMAL MAINTENANCE SCHEDULE

The following maintenance services must be performed to ensure good emission control and performance. Keep receipts for all vehicle emission services to protect your warranty. Where both mileage and time are shown, the frequency of service is determined by whichever occurs first.

*1 : If TOP TIER Detergent Gasoline is not available, one bottle of additive is recommended. Additives are available from your authorized K900 Kia dealer along with information on how to use them. Do not mix other additives.

*2 : Fuel filter & Fuel tank air filter are considered to be maintenance free but periodic inspection is recommended for this maintenance schedule depends on fuel quality. If there are some important safety matters like fuel flow restriction, surging, loss of power, hard starting problem etc, replace the fuel filter immediately regardless of maintenance schedule and consult an authorized K900 Kia dealer for details.

*3 : Rear differential oil should be changed anytime rear differential have been submerged in water.

*4 : The drive belt should be replaced when cracks occur or tension is reduced excessively.

*5 : Use only the specified automatic transmission fluid. (Refer to "Recommended lubricants and capacities" in section 8 or the label in the engine room.)

*6 : Inspect for excessive tappet noise and/or engine vibration and adjust if necessary.

NORMAL MAINTENANCE SCHEDULE (CONT.)

7,500 miles (12,000 km) or 6 months

- ❑ Rotate tires
- ❑ Inspect air cleaner filter
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect fuel tank air filter
- ❑ Inspect power steering fluid
- ❑ Inspect vacuum hose
- ❑ Inspect vapor hose and fuel filler cap
- ❑ Replace engine oil and filter
  (7,500 miles (12,000 km) or 12 months)
- ❑ Add fuel additives *1
  (7,500 miles (12,000 km) or 12 months)

❉Inspect : Inspect and if necessary, adjust, correct, clean or replace.

15,000 miles (24,000 km) or 12 months

- ❑ Rotate tires
- ❑ Inspect air cleaner filter
- ❑ Inspect vacuum hose
- ❑ Inspect air conditioning refrigerant
- ❑ Inspect brake hoses and lines
- ❑ Inspect drive shafts and boots
- ❑ Inspect exhaust pipe and muffler
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect fuel tank air filter
- ❑ Inspect front brake disc/pad, calipers
- ❑ Inspect propeller shaft
- ❑ Inspect rear brake disc/pad
- ❑ Inspect steering gear box, linkage & boots/lower arm ball joint, upper arm ball joint
- ❑ Inspect suspension mounting bolts
- ❑ Inspect power steering fluid
- ❑ Inspect EHPS (Electronic Hydraulic Power Steering) motor pump and hoses
- ❑ Inspect vapor hose and fuel filler cap
- ❑ Replace climate control air filter
  (for evaporator and blower unit)

(Continued)

NORMAL MAINTENANCE SCHEDULE (CONT.)

(Continued)

❑ Replace engine oil and filter
(15,000 miles (24,000 km) or 24 months)
❑ Add fuel additives *1
(15,000 miles (24,000 km) or 24 months)

❊Inspect : Inspect and if necessary, adjust, correct, clean or replace.

22,500 miles (36,000 km) or 18 months

❑ Rotate tires
❑ Inspect air cleaner filter
❑ Inspect vacuum hose
❑ Inspect power steering fluid
❑ Inspect fuel lines, fuel hoses and connections
❑ Inspect vapor hose and fuel filler cap
❑ Inspect fuel tank air filter
❑ Replace engine oil and filter
(22,500 miles (36,000 km) or 36 months)
❑ Add fuel additives *1
(22,500 miles (36,000 km) or 36 months)

❊Inspect : Inspect and if necessary, adjust, correct, clean or replace.

NORMAL MAINTENANCE SCHEDULE (CONT.)

30,000 miles (48,000 km) or 24 months

- ❑ Rotate tires
- ❑ Inspect vacuum hose
- ❑ Inspect air conditioning refrigerant
- ❑ Inspect brake hoses and lines
- ❑ Inspect drive shafts and boots
- ❑ Inspect exhaust pipe and muffler
- ❑ Inspect front brake disc/pads, calipers
- ❑ Inspect propeller shaft
- ❑ Inspect rear brake disc/pads
- ❑ Inspect steering gear box, linkage & boots/lower arm ball joint, upper arm ball joint
- ❑ Inspect suspension mounting bolts
- ❑ Inspect brake fluid
- ❑ Inspect fuel filter *2
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect parking brake
- ❑ Inspect vapor hose and fuel filler cap, fuel tank
- ❑ Inspect power steering fluid
- ❑ Inspect EHPS (Electronic Hydraulic Power Steering) motor pump and hoses

(Continued)

(Continued)

- ❑ Replace climate control air filter (for evaporator and blower unit)
- ❑ Replace air cleaner filter
- ❑ Replace engine oil and filter (30,000 miles (48,000 km) or 48 months)
- ❑ Replace fuel tank air filter *2
- ❑ Add fuel additives *1 (30,000 miles (48,000 km) or 48 months)

❉Inspect : Inspect and if necessary, adjust, correct, clean or replace.

NORMAL MAINTENANCE SCHEDULE (CONT.)

37,500 miles (60,000 km) or 30 months

- ❑ Rotate tires
- ❑ Inspect air cleaner filter
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect vapor hose and fuel filler cap
- ❑ Inspect fuel tank air filter
- ❑ Inspect vacuum hose
- ❑ Inspect rear differential oil *3
  (40,000 miles (64,000 km) or 48 months
- ❑ Inspect power steering fluid
- ❑ Replace engine oil and filter
  (37,500 miles (60,000 km) or 60 months)
- ❑ Add fuel additives *1
  (37,500 miles (60,000 km) or 60 months)

❉Inspect : Inspect and if necessary, adjust, correct, clean or replace.

45,000 miles (72,000 km) or 36 months

- ❑ Rotate tires
- ❑ Inspect air cleaner filter
- ❑ Inspect vacuum hose
- ❑ Inspect air conditioning refrigerant
- ❑ Inspect brake hoses and lines
- ❑ Inspect drive shafts and boots
- ❑ Inspect exhaust pipe and muffler
- ❑ Inspect front brake disc/pads, calipers
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect vapor hose and fuel filler cap
- ❑ Inspect fuel tank air filter
- ❑ Inspect propeller shaft
- ❑ Inspect rear brake disc/pads
- ❑ Inspect steering gear box, linkage & boots/lower arm ball joint, upper arm ball joint
- ❑ Inspect suspension mounting bolts
- ❑ Inspect power steering fluid
- ❑ Inspect EHPS (Electronic Hydraulic Power Steering) motor pump and hoses
- ❑ Replace climate control air filter
  (for evaporator and blower unit)

(Continued)

NORMAL MAINTENANCE SCHEDULE (CONT.)

(Continued)

❑ Replace engine oil and filter
(45,000 miles (72,000 km) or 72 months)
❑ Add fuel additives *1
(45,000 miles (72,000 km) or 72 months)

❉Inspect : Inspect and if necessary, adjust, correct, clean or replace.

52,500 miles (84,000 km) or 42 months

❑ Rotate tires
❑ Inspect air cleaner filter
❑ Inspect fuel lines, fuel hoses and connections
❑ Inspect vapor hose and fuel filler cap
❑ Inspect fuel tank air filter
❑ Inspect vacuum hose
❑ Inspect power steering fluid
❑ Replace engine oil and filter
(52,500 miles (84,000 km) or 84 months)
❑ Add fuel additives *1
(52,500 miles (84,000 km) or 84 months)

❉Inspect : Inspect and if necessary, adjust, correct, clean or replace.

NORMAL MAINTENANCE SCHEDULE (CONT.)

60,000 miles (96,000 km) or 48 months

- ❑ Rotate tires
- ❑ Inspect vacuum hose
- ❑ Inspect air conditioning refrigerant
- ❑ Inspect brake hoses and lines
- ❑ Inspect drive shafts and boots
- ❑ Inspect exhaust pipe and muffler
- ❑ Inspect front brake disc/pads, calipers
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect valve clearance (3.8L) *6
- ❑ Inspect propeller shaft
- ❑ Inspect rear brake disc/pads
- ❑ Inspect steering gear box, linkage & boots/lower arm ball joint, upper arm ball joint
- ❑ Inspect suspension mounting bolts
- ❑ Inspect brake fluid
- ❑ Inspect fuel filter *2
- ❑ Inspect parking brake
- ❑ Inspect vapor hose and fuel filler cap, fuel tank
- ❑ Inspect drive belts
  (First, 60,000 miles (96,000 km) or 72 months
  after every 15,000 miles (24,000 km) or 24 months) *4

(Continued)

(Continued)

- ❑ Inspect power steering fluid
- ❑ Inspect EHPS (Electronic Hydraulic Power Steering) motor pump and hoses
- ❑ Replace air cleaner filter
- ❑ Replace climate control air filter
  (for evaporator and blower unit)
- ❑ Replace engine oil and filter
  (60,000 miles (96,000 km) or 96 months)
- ❑ Replace fuel tank air filter *2
- ❑ Add fuel additives *1
  (60,000 miles (96,000 km) or 96 months)

❉Inspect : Inspect and if necessary, adjust, correct, clean or replace.

NORMAL MAINTENANCE SCHEDULE (CONT.)

67,500 miles (108,000 km) or 54 months

- ❑ Rotate tires
- ❑ Inspect air cleaner filter
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect vapor hose and fuel filler cap
- ❑ Inspect fuel tank air filter
- ❑ Inspect vacuum hose
- ❑ Inspect power steering fluid
- ❑ Replace engine oil and filter
  (67,500 miles (108,000 km) or 108 months)
- ❑ Add fuel additives *1
  (67,500 miles (108,000 km) or 108 months)

❉Inspect : Inspect and if necessary, adjust, correct, clean or replace.

75,000 miles (120,000 km) or 60 months

- ❑ Rotate tires
- ❑ Inspect air cleaner filter
- ❑ Inspect vacuum hose
- ❑ Inspect air conditioning refrigerant
- ❑ Inspect brake hoses and lines
- ❑ Inspect drive shafts and boots
- ❑ Inspect exhaust pipe and muffler
- ❑ Inspect front brake disc/pads, calipers
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect vapor hose and fuel filler cap
- ❑ Inspect fuel tank air filter
- ❑ Inspect propeller shaft
- ❑ Inspect rear brake disc/pads
- ❑ Inspect steering gear box, linkage & boots/lower arm ball joint, upper arm ball joint
- ❑ Inspect suspension mounting bolts
- ❑ Inspect drive belts
  (First, 60,000 miles (96,000 km) or 72 months
  after every 15,000 miles (24,000 km) or 24 months)*4
- ❑ Inspect power steering fluid

(Continued)

NORMAL MAINTENANCE SCHEDULE (CONT.)

(Continued)

- ❑ Inspect EHPS (Electronic Hydraulic Power Steering) motor pump and hoses
- ❑ Inspect rear differential oil*3
  (80,000 miles (128,000 km) or 96 months)
- ❑ Replace climate control air filter
  (for evaporator and blower unit)
- ❑ Replace engine oil and filter
  (75,000 miles (120,000 km) or 120 months)
- ❑ Add fuel additives *1
  (75,000 miles (120,000 km) or 120 months)

❉Inspect : Inspect and if necessary, adjust, correct, clean or replace.

82,500 miles (132,000 km) or 66 months

- ❑ Rotate tires
- ❑ Inspect air cleaner filter
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect vapor hose and fuel filler cap
- ❑ Inspect fuel tank air filter
- ❑ Inspect vacuum hose
- ❑ Inspect power steering fluid
- ❑ Replace engine oil and filter
  (82,500 miles (132,000 km) or 132 months)
- ❑ Add fuel additives *1
  (82,500 miles (132,000 km) or 132 months)

❉Inspect : Inspect and if necessary, adjust, correct, clean or replace.

NORMAL MAINTENANCE SCHEDULE (CONT.)

90,000 miles (144,000 km) or 72 months

- ❑ Rotate tires
- ❑ Inspect vacuum hose
- ❑ Inspect air conditioning refrigerant
- ❑ Inspect brake hoses and lines
- ❑ Inspect drive shafts and boots
- ❑ Inspect exhaust pipe and muffler
- ❑ Inspect front brake disc/pads, calipers
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect propeller shaft
- ❑ Inspect rear brake disc/pads
- ❑ Inspect steering gear box, linkage & boots/lower arm ball joint, upper arm ball joint
- ❑ Inspect suspension mounting bolts
- ❑ Inspect brake fluid
- ❑ Inspect fuel filter *2
- ❑ Inspect parking brake
- ❑ Inspect vapor hose and fuel filler cap, fuel tank
- ❑ Inspect drive belts
  (First, 60,000 miles (96,000 km) or 72 months
  after every 15,000 miles (24,000 km) or 24 months)*4

(Continued)

(Continued)

- ❑ Inspect power steering fluid
- ❑ Inspect EHPS (Electronic Hydraulic Power Steering) motor pump and hoses
- ❑ Replace climate control air filter
  (for evaporator and blower unit)
- ❑ Replace air cleaner filter
- ❑ Replace engine oil and filter
  (90,000 miles (144,000 km) or 144 months)
- ❑ Replace fuel tank air filter *2
- ❑ Add fuel additives *1
  (90,000 miles (144,000 km) or 144 months)

❊Inspect : Inspect and if necessary, adjust, correct, clean or replace.

NORMAL MAINTENANCE SCHEDULE (CONT.)

97,500 miles (156,000 km) or 78 months

- ❑ Rotate tires
- ❑ Inspect air cleaner filter
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect vapor hose and fuel filler cap
- ❑ Inspect fuel tank air filter
- ❑ Inspect vacuum hose
- ❑ Inspect power steering fluid
- ❑ Replace engine oil and filter
  (97,500 miles (156,000 km) or 156 months)
- ❑ Add fuel additives *1
  (97,500 miles (156,000 km) or 156 months)
- ❑ Replace spark plugs (iridium coated)

❉Inspect : Inspect and if necessary, adjust, correct, clean or replace.

105,000 miles (168,000 km) or 84 months

- ❑ Rotate tires
- ❑ Inspect air cleaner filter
- ❑ Inspect vacuum hose
- ❑ Inspect air conditioning refrigerant
- ❑ Inspect brake hoses and lines
- ❑ Inspect drive shafts and boots
- ❑ Inspect exhaust pipe and muffler
- ❑ Inspect front brake disc/pads, calipers
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect fuel tank air filter
- ❑ Inspect propeller shaft
- ❑ Inspect rear brake disc/pads
- ❑ Inspect steering gear box, linkage & boots/lower arm ball joint, upper arm ball joint
- ❑ Inspect suspension mounting bolts
- ❑ Inspect drive belts
  (First, 60,000 miles (96,000 km) or 72 months
  after every 15,000 miles (24,000 km) or 24 months) *4
- ❑ Inspect power steering fluid
- ❑ Inspect EHPS (Electronic Hydraulic Power Steering) motor pump and hoses

(Continued)

NORMAL MAINTENANCE SCHEDULE (CONT.)

(Continued)

- ❑ Replace climate control air filter
  (for evaporator and blower unit)
- ❑ Replace engine oil and filter
  (105,000 miles (168,000 km) or 168 months)
- ❑ Add fuel additives *1
  (105,000 miles (168,000 km) or 168 months)

❉Inspect : Inspect and if necessary, adjust, correct, clean or replace.

112,500 miles (180,000 km) or 90 months

- ❑ Rotate tires
- ❑ Inspect air cleaner filter
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect vapor hose and fuel filler cap
- ❑ Inspect fuel tank air filter
- ❑ Inspect vacuum hose
- ❑ Inspect power steering fluid
- ❑ Replace engine oil and filter
  (112,500 miles (180,000 km) or 180 months)
- ❑ Add fuel additives *1
  (112,500 miles (180,000 km) or 180 months)

❉Inspect : Inspect and if necessary, adjust, correct, clean or replace.

NORMAL MAINTENANCE SCHEDULE (CONT.)

120,000 miles (192,000 km) or 96 months

- ❑ Rotate tires
- ❑ Inspect vacuum hose
- ❑ Inspect air conditioning refrigerant
- ❑ Inspect brake hoses and lines
- ❑ Inspect drive shafts and boots
- ❑ Inspect exhaust pipe and muffler
- ❑ Inspect front brake disc/pads, calipers
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect propeller shaft
- ❑ Inspect rear brake disc/pads
- ❑ Inspect steering gear box, linkage & boots/lower arm ball joint, upper arm ball joint
- ❑ Inspect suspension mounting bolts
- ❑ Inspect brake fluid
- ❑ Inspect fuel filter *2
- ❑ Inspect parking brake
- ❑ Inspect vapor hose and fuel filler cap, fuel tank
- ❑ Inspect drive belts
  (First, 60,000 miles (96,000 km) or 72 months
  after every 15,000 miles (24,000 km) or 24 months)*4

(Continued)

(Continued)

- ❑ Inspect power steering fluid
- ❑ Inspect EHPS (Electronic Hydraulic Power Steering) motor pump and hoses
- ❑ Inspect rear differential oil *3
  (120,000 miles (192,000 km) or 144 months)
- ❑ Replace air cleaner filter
- ❑ Replace climate control air filter
  (for evaporator and blower unit)
- ❑ Replace fuel tank air filter *2
- ❑ Replace engine oil and filter
  (120,000 miles (192,000 km) or 192 months)
- ❑ Replace coolant
  (First, 120,000 miles (192,000 km) or 120 months
  after every 30,000 miles (48,000 km) or 24 months)
- ❑ Add fuel additives *1
  (120,000 miles (192,000 km) or 192 months)

❊Inspect : Inspect and if necessary, adjust, correct, clean or replace.

NORMAL MAINTENANCE SCHEDULE (CONT.)

127,500 miles (204,000 km) or 102 months

- ❑ Rotate tires
- ❑ Inspect air cleaner filter
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect vapor hose and fuel filler cap
- ❑ Inspect fuel tank air filter
- ❑ Inspect vacuum hose
- ❑ Inspect power steering fluid
- ❑ Replace engine oil and filter
  (127,500 miles (204,000 km) or 204 months)
- ❑ Add fuel additives *1
  (127,500 miles (204,000 km) or 204 months)

❈Inspect : Inspect and if necessary, adjust, correct, clean or replace.

135,000 miles (216,000 km) or 108 months

- ❑ Rotate tires
- ❑ Inspect air cleaner filter
- ❑ Inspect vacuum hose
- ❑ Inspect air conditioning refrigerant
- ❑ Inspect brake hoses and lines
- ❑ Inspect drive shafts and boots
- ❑ Inspect exhaust pipe and muffler
- ❑ Inspect front brake disc/pads, calipers
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect vapor hose and fuel filler cap
- ❑ Inspect fuel tank air filter
- ❑ Inspect propeller shaft
- ❑ Inspect rear brake disc/pads
- ❑ Inspect steering gear box, linkage & boots/lower arm ball joint, upper arm ball joint
- ❑ Inspect suspension mounting bolts
- ❑ Inspect drive belts
  (First, 60,000 miles (96,000 km) or 72 months
  after every 15,000 miles (24,000 km) or 24 months)*4
- ❑ Inspect power steering fluid

(Continued)

NORMAL MAINTENANCE SCHEDULE (CONT.)

(Continued)

- ❑ Inspect EHPS (Electronic Hydraulic Power Steering) motor pump and hoses
- ❑ Replace climate control air filter (for evaporator and blower unit)
- ❑ Replace engine oil and filter (135,000 miles (216,000 km) or 216 months)
- ❑ Add fuel additives *1 (135,000 miles (216,000 km) or 216 months)

❉Inspect : Inspect and if necessary, adjust, correct, clean or replace.

142,500 miles (228,000 km) or 114 months

- ❑ Rotate tires
- ❑ Inspect air cleaner filter
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect vapor hose and fuel filler cap
- ❑ Inspect fuel tank air filter
- ❑ Inspect vacuum hose
- ❑ Inspect power steering fluid
- ❑ Replace engine oil and filter (142,500 miles (228,000 km) or 228 months)
- ❑ Add fuel additives *1 (142,500 miles (228,000 km) or 228 months)

❉Inspect : Inspect and if necessary, adjust, correct, clean or replace.

NORMAL MAINTENANCE SCHEDULE (CONT.)

150,000 miles (240,000 km) or 120 months

- ❑ Rotate tires
- ❑ Inspect vacuum hose
- ❑ Inspect air conditioning refrigerant
- ❑ Inspect brake hoses and lines
- ❑ Inspect drive shafts and boots
- ❑ Inspect exhaust pipe and muffler
- ❑ Inspect fuel lines, fuel hoses and connections
- ❑ Inspect front brake disc/pads, calipers
- ❑ Inspect propeller shaft
- ❑ Inspect rear brake disc/pads
- ❑ Inspect steering gear box, linkage & boots/lower arm ball joint, upper arm ball joint
- ❑ Inspect suspension mounting bolts
- ❑ Inspect brake fluid
- ❑ Inspect parking brake
- ❑ Inspect vapor hose and fuel filler cap, fuel tank
- ❑ Inspect power steering fluid
- ❑ Inspect EHPS (Electronic Hydraulic Power Steering) motor pump, belt and hoses
- ❑ Inspect rear differential oil *3
  (160,000 miles (256,000 km) or 192 months)

(Continued)

(Continued)

- ❑ Inspect drive belts
  (First, 60,000 miles (96,000 km) or 72 months
  after every 15,000 miles (24,000 km) or 24 months)*4
- ❑ Replace air cleaner filter
- ❑ Replace climate control air filter
  (for evaporator and blower unit)
- ❑ Replace coolant
  (First, 120,000 miles (192,000 km) or 120 months
  after every 30,000 miles (48,000 km) or 24 months)
- ❑ Replace engine oil and filter
  (150,000 miles (240,000 km) or 240 months)
- ❑ Replace fuel filter *2
- ❑ Replace fuel tank air filter *2
- ❑ Add fuel additives *1
  (150,000 miles (240,000 km) or 240 months)

❉Inspect : Inspect and if necessary, adjust, correct, clean or replace.

No check, No service required

- ❑ Automatic transmission fluid *5

MAINTENANCE UNDER SEVERE USAGE CONDITIONS

The following items must be serviced more frequently on cars normally used under severe driving conditions. Refer to the chart below for the appropriate maintenance intervals.

R : Replace I : Inspect and, after inspection, clean, adjust, repair or replace if necessary

MAINTENANCE ITEM	MAINTENANCE OPERATION	MAINTENANCE INTERVALS	DRIVING CONDITION
Engine oil and filter	R	Every 3,750 miles (6,000 km) or 6 months	A, B, C, D, E, F, G, H, I, J, K
Air cleaner filter	I	More frequently	C, E
Spark plugs	R	More frequently	A, B, H, I, K
Automatic transmission fluid	R	Every 60,000 miles (96,000 km)	A, C, D, E, F, G, H, I
Front brake disc/pads, calipers	I	More frequently	C, D, G, H
Rear brake disc /pads	I	More frequently	C, D, G, H
Parking brake	I	More frequently	C, D, G, H

MAINTENANCE ITEM	MAINTENANCE OPERATION	MAINTENANCE INTERVALS	DRIVING CONDITION
Steering gear box, linkage & boots/ lower arm ball joint, upper arm ball joint	I	More frequently	C, D, E, F, G, H, I
Drive shafts and boots	I	Every 7,500 miles (12,000 km) or 6 months	C, D, E, F, G, H, I, J
Rear differential oil	R	Every 80,000 miles (128,000 km)	C, G, H, I, J
Climate control air filter (for evaporator and blower unit)	R	More frequently	C, E
Propeller shaft	I	Every 7,500 miles (12,000 km) or 6 months	C, E

SEVERE DRIVING CONDITIONS

A - Repeatedly driving short distance of less than 5 miles (8 km) in normal temperature or less than 10 miles (16 km) in freezing temperature

B - Extensive engine idling or low speed driving for long distances

C - Driving on rough, dusty, muddy, unpaved, graveled or salt- spread roads

D - Driving in areas using salt or other corrosive materials or in very cold weather

E - Driving in sandy areas

F - Driving in heavy traffic area over 90°F (32°C)

G - Driving on uphill, downhill, or mountain road

H - Towing a Trailer, or using a camper, or roof rack

I - Driving as a patrol car, taxi, other commercial use or vehicle towing

J - Driving over 106 mph (170 km/h)

K - Frequently driving in stop-and-go conditions

EXPLANATION OF SCHEDULED MAINTENANCE ITEMS

Engine oil and filter

The engine oil and filter should be changed at the intervals specified in the maintenance schedule. If the car is being driven in severe conditions, more frequent oil and filter changes are required.

Drive belts

Inspect all drive belts for evidence of cuts, cracks, excessive wear or oil saturation and replace if necessary.

Fuel filter

A clogged filter can limit the speed at which the vehicle may be driven, damage the emission system and cause multiple issues such as hard starting. If an excessive amount of foreign matter accumulates in the fuel tank, the filter may require replacement more frequently.

After installing a new filter, run the engine for several minutes, and check for leaks at the connections. Fuel filters should be installed by an authorized K900 Kia dealer.

Fuel lines, fuel hoses and connections

Check the fuel lines, fuel hoses and connections for leakage and damage. Have an authorized K900 Kia dealer replace any damaged or leaking parts immediately.

Vapor hose and fuel filler cap

The vapor hose and fuel filler cap should be inspected at those intervals specified in the maintenance schedule. Make sure that a new vapor hose or fuel filler cap is correctly replaced.

Air cleaner filter

A Genuine Kia air cleaner filter is recommended when the filter is replaced.

Spark plugs

Make sure to install new spark plugs of the correct heat range.

Cooling system

Check cooling system components, such as radiator, coolant reservoir, hoses and connections for leakage and damage. Replace any damaged parts.

Coolant

The coolant should be changed at the intervals specified in the maintenance schedule.

Automatic transaxle fluid

Automatic transaxle fluid should not be checked under normal usage conditions.

But in severe conditions, the fluid should be changed at an authorized K900 Kia dealer in accordance to the scheduled maintenance at the beginning of this chapter.

✻ NOTICE

Automatic transaxle fluid color is basically red.
As the vehicle is driven, the automatic transaxle fluid will begin to look darker.
This is normal condition and you should not judge the need to replace the fluid based upon the changed color.

⚠ CAUTION

The use of a non-specified fluid could result in transmission malfunction and failure.

Use only specified automatic transmission fluid. (Refer to "Recommended lubricants and capacities" in section 8.)

Brake hoses and lines

Visually check for proper installation, chafing, cracks, deterioration and any leakage. Replace any deteriorated or damaged parts immediately.

Brake fluid

Check brake fluid level in the brake fluid reservoir. The level should be between “MIN” and “MAX” marks on the side of the reservoir. Use only hydraulic brake fluid conforming to DOT 3 or DOT 4 specification.

Brake discs, pads, calipers and rotors

Check the pads for excessive wear, discs for run out and wear, and calipers for fluid leakage.

For more information on checking the pads or lining wear limit, we recommend you to refer to the Kia website.

(**http://www.kiatechinfo.com**)

Exhaust pipe and muffler

Visually inspect the exhaust pipes, muffler and hangers for cracks, deterioration, or damage. Start the engine and listen carefully for any exhaust gas leakage. Tighten connections or replace parts as necessary.

Suspension mounting bolts

Check the suspension connections for looseness or damage. Retighten to the specified torque.

Steering gear box, linkage & boots/lower arm ball joint

With the vehicle stopped and engine off, check for excessive free-play in the steering wheel.

Check the linkage for bends or damage. Check the dust boots and ball joints for deterioration, cracks, or damage. Replace any damaged parts.

Power steering pump, belt and hoses

Check the power steering pump and hoses for leakage and damage. Replace any damaged or leaking parts immediately. Inspect the power steering belt (or drive belt) for evidence of cuts, cracks, excessive wear, oiliness and proper tension. Replace or adjust it if necessary.

Drive shafts and boots

Check the drive shafts, boots and clamps for cracks, deterioration, or damage. Replace any damaged parts and, if necessary, repack the grease.

Air conditioning refrigerant

Check the air conditioning lines and connections for leakage and damage.

ENGINE OIL

Checking the engine oil level

OKH073002N

1. Be sure the vehicle is on level ground.
2. Start the engine and allow it to reach normal operating temperature.
3. Turn the engine off and wait for a few minutes (about 5 minutes) for the oil to return to the oil pan.
4. Pull the dipstick out, wipe it clean, and re-insert it fully.

⚠ WARNING

■ Radiator hose

Be very careful not to touch the radiator hose when checking or adding the engine oil as it may be hot enough to burn you.

5. Pull the dipstick out again and check the level. The level should be between F and L.

⚠ CAUTION

- **Do not overfill with engine oil. Engine damage may result.**
- **Do not spill engine oil, when adding or changing engine oil. If you spill engine oil in the engine room, wipe it off immediately.**

OKH073003N

If it is near or at L, add enough oil to bring the level to F. **Do not overfill.**

Use a funnel to help prevent oil from being spilled on engine components.

Use only the specified engine oil. (Refer to "Recommended lubricants and capacities" in section 8.)

Changing the engine oil and filter

Have engine oil and filter changed by an authorized K900 Kia dealer according to the Maintenance Schedule at the beginning of this section.

⚠ CALIFORNIA PROPOSITION 65 WARNING

Engine oil contains chemicals known to the State of California to cause cancer, birth defects and reproductive harm. Used engine oil may cause irritation or cancer of the skin if left in contact with the skin for prolonged periods of time. Always protect your skin by washing your hands thoroughly with soap and warm water as soon as possible after handling used oil.

ENGINE COOLANT

The high-pressure cooling system has a reservoir filled with year-round antifreeze coolant. The reservoir is filled at the factory.

Check the antifreeze protection and coolant level at least once a year, at the beginning of the winter season, and before traveling to a colder climate.

Checking the coolant level

⚠ WARNING

■ Removing radiator cap

- **Never attempt to remove the radiator cap while the engine is operating or hot. Doing so might lead to cooling system and engine damage and could result in serious personal injury from escaping hot coolant or steam.**
- **Turn the engine off and wait until it cools down. Use extreme care when removing the radiator cap. Wrap a thick towel around it, and turn it counterclockwise slowly to the first stop. Step back while the pressure is released from the cooling system.**

(Continued)

(Continued)

When you are sure all the pressure has been released, press down on the cap, using a thick towel, and continue turning counterclockwise to remove it.

- **Even if the engine is not operating, do not remove the radiator cap or the drain plug while the engine and radiator are hot. Hot coolant and steam may still blow out under pressure, causing serious injury.**

⚠ WARNING

The electric motor (cooling fan) is controlled by engine coolant temperature, refrigerant pressure and vehicle speed. It may sometimes operate even when the engine is not running. Use extreme caution when working near the blades of the cooling fan so that you are not injured by a rotating fan blades. As the engine coolant temperature decreases, the electric motor will automatically shut off. This is a normal condition.

If your vehicle is equipped with GDI, the electric motor (cooling fan) may operate until you disconnect the negative battery cable.

OKH073004N

Check the condition and connections of all cooling system hoses and heater hoses. Replace any swollen or deteriorated hoses.

The coolant level should be filled between F and L marks on the side of the coolant reservoir when the engine is cool.

If the coolant level is low, add enough distilled (deionized) water. Bring the level to F, but do not overfill. If frequent additions are required, see an authorized K900 Kia dealer for a cooling system inspection.

Recommended engine coolant

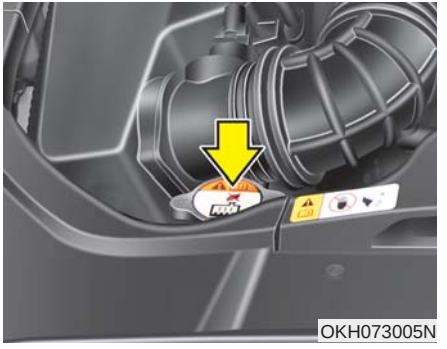
- When adding coolant, use only deionized water, distilled water or soft water for your vehicle and never mix hard water in the coolant filled at the factory. An improper coolant mixture can result in serious malfunction or engine damage.
- The engine in your vehicle has aluminum engine parts and must be protected by an ethylene-glycol-based coolant to prevent corrosion and freezing.
- DO NOT USE alcohol or methanol coolant or mix them with the specified coolant.
- Do not use a solution that contains more than 60% antifreeze or less than 35% antifreeze, which would reduce the effectiveness of the solution.
- 50% water and 50% antifreeze mix is the easiest to mix together as it will be same quantity of each and can work reasonable for most situations.

For mixture percentage, refer to the following table.

Ambient Temperature	Mixture Percentage (volume)	
	Antifreeze	Water
5°F (-15°C)	35	65
-13°F (-25°C)	40	60
-31°F (-35°C)	50	50
-49°F (-45°C)	60	40

✻ NOTICE

If in doubt about mix ratio 50% water and 50% antifreeze mix is the easiest to mix together as it will be same quantity of each. It can work reasonable for most temperature range of -31°F and higher.



⚠ WARNING

■ Radiator cap

Do not remove the radiator cap when the engine and radiator are hot. Scalding hot coolant and steam may blow out under pressure causing serious injury.

Changing the coolant

Have coolant changed by an authorized K900 Kia dealer according to the Maintenance Schedule at the beginning of this section.

⚠ CAUTION

Put a thick cloth around the radiator cap before refilling the coolant in order to prevent the coolant from overflowing into engine parts such as the generator.

⚠ WARNING

■ Coolant

- **Do not use radiator coolant or antifreeze in the washer fluid reservoir.**
- **Radiator coolant can severely obscure visibility when sprayed on the windshield and may cause loss of vehicle control or damage to paint and body trim.**

BRAKE FLUID

Checking the brake fluid level

OKH073006N

Check the fluid level in the reservoir periodically. The fluid level should be between MAX and MIN marks on the side of the reservoir.

Before removing the reservoir cap and adding brake fluid, clean the area around the reservoir cap thoroughly to prevent brake fluid contamination.

If the level is low, add fluid to the MAX level. The level will fall with accumulated mileage. This is a normal condition associated with the wear of the brake linings. If the fluid level is excessively low, have the brake system checked by an authorized K900 Kia dealer.

Use only the specified brake fluid. (Refer to "Recommended lubricants or capacities" in section 8.)

Never mix different types of fluid.

⚠ WARNING

■ Loss of brake fluid

In the event the brake system requires frequent additions of fluid, the vehicle should be inspected by an authorized K900 Kia dealer.

⚠ WARNING

■ Brake fluid

When changing and adding brake fluid, handle it carefully. Do not let it come in contact with your eyes. If brake fluid should come in contact with your eyes, immediately flush them with a large quantity of fresh tap water. Have your eyes examined by a doctor as soon as possible.

⚠ CAUTION

Do not allow brake fluid to contact the vehicle's body paint, as paint damage will result. Brake fluid, which has been exposed to open air for an extended time should never be used as its quality cannot be guaranteed. It should be disposed of properly. Don't put in the wrong kind of fluid. A few drops of mineral-based oil, such as engine oil, in your brake system can damage brake system parts.

POWER STEERING FLUID

Checking the power steering fluid level

With the vehicle on level ground, check the fluid level in the power steering reservoir periodically. The fluid should be between MAX and MIN marks on the side of the gauge at the normal temperature.

Before adding power steering fluid, thoroughly clean the area around the reservoir cap to prevent power steering fluid contamination.

If the level is low, add fluid to the MAX level.

In the event the power steering system requires frequent addition of fluid, the vehicle should be inspected by an authorized K900 Kia dealer.

⚠ CAUTION

- **To avoid damage to the power steering pump, do not operate the vehicle for prolonged periods with a low power steering fluid level.**
- **Never start the engine when the reservoir tank is empty.**
- **When adding fluid, be careful that dirt does not get into the tank.**
- **Too little fluid can result in increased steering effort and/or noise from the power steering system.**
- **The use of the non-specified fluid could reduce the effectiveness of the power steering system and cause damage to it.**

✻ NOTICE

Check that the fluid level is in the "HOT" range on the gauge. If the fluid is cold, check that it is in the "COLD" range.

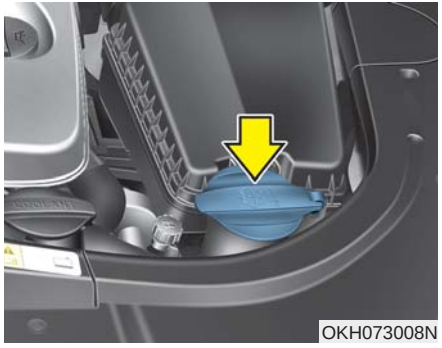
Use only the specified power steering fluid. (Refer to "Recommended lubricants or capacities" in section 8.)

Checking the power steering hose

Check the connections for oil leaks, damage and twists in the power steering hose before driving.

WASHER FLUID

Checking the washer fluid level


OKH073008N

The reservoir is translucent so that you can check the level with a quick visual inspection.

Check the fluid level in the washer fluid reservoir and add fluid if necessary. Plain water may be used if washer fluid is not available. However, use washer solvent with antifreeze characteristics in cold climates to prevent freezing.

⚠ WARNING

■ Coolant

- **Do not use radiator coolant or antifreeze in the washer fluid reservoir.**
- **Radiator coolant can severely obscure visibility when sprayed on the windshield and may cause loss of vehicle control or damage to paint and body trim.**
- **Windshield washer fluid agents contain some amounts of alcohol and can be flammable under certain circumstances. Do not allow sparks or flame to contact the washer fluid or the washer fluid reservoir. Damage to the vehicle or occupants could occur.**
- **Windshield washer fluid is poisonous to humans and animals. Do not drink and avoid contacting windshield washer fluid. Serious injury or death could occur.**

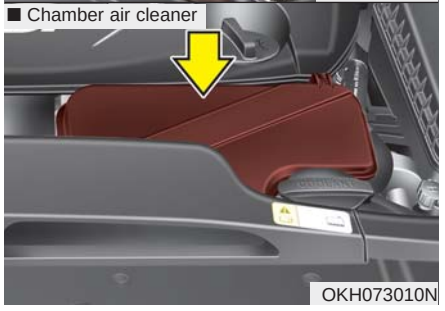
AIR CLEANER

Filter replacement

■ Main air cleaner

OKH073009N

■ Chamber air cleaner



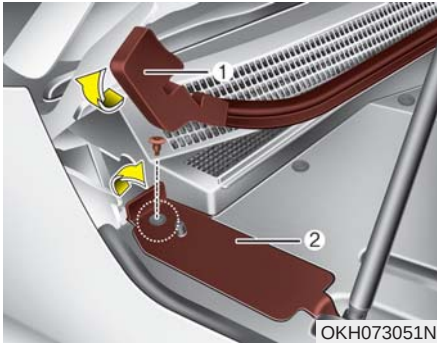
OKH073010N

It must be replaced when necessary, and should not be washed.

You can clean the filter when inspecting the air cleaner element.

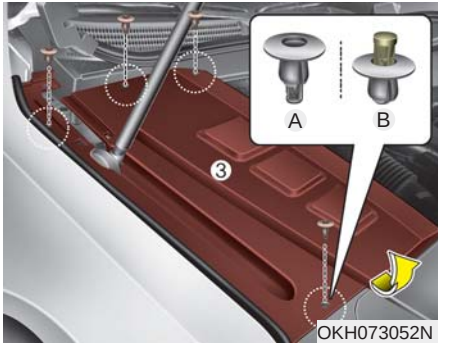
Clean the filter by using compressed air.

Main air cleaner



OKH073051N

1. Lift the end of strip (1) up.
2. Press the fastener head with screw driver and then pull the fastener out.
3. Lift the rear portion of small service cover (2) up and then remove the service cover.

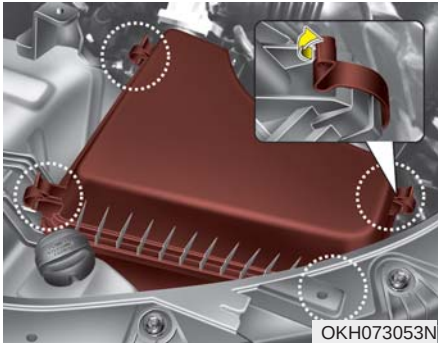


OKH073052N

(A) : for assemble

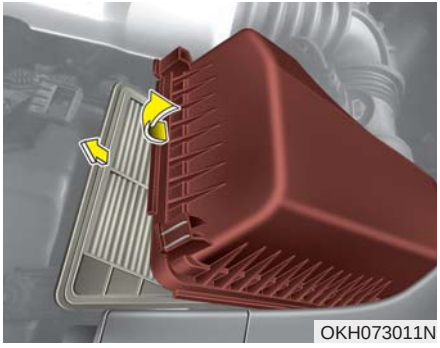
(B) : for remove

4. Press the fastener head with screw driver and then pull the fastener out from main service cover (3).
5. Pull the main service cover over 0.28 in (7 mm) to toward the front of the vehicle.
6. Lift the main service cover up and then remove the main service cover. Be careful not to damage the holder under the main service cover.



7.Loosen the air cleaner cover attaching clips and open the cover.

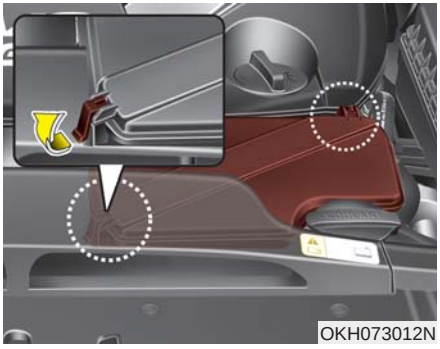
8.Wipe the inside of the air cleaner.



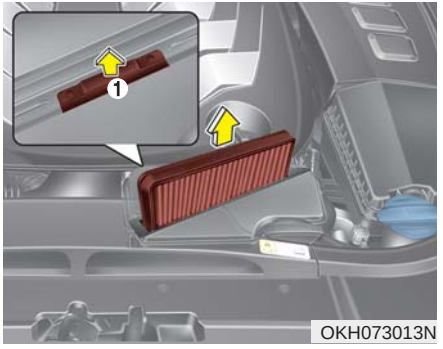
9.Replace the air cleaner filter.

10. Lock the cover with the cover attaching clips.

Chamber air cleaner



1.Loosen the air cleaner cover attaching clips and open the cover.



2. Replace the air cleaner filter after pulling up the locking tab (1).
3. Lock the cover with the cover attaching clips.

Replace the filter according to the Maintenance Schedule.

If the vehicle is operated in extremely dusty or sandy areas, replace the element more often than the usual recommended intervals. (Refer to "Maintenance under severe usage conditions" in this section.)

⚠ CAUTION

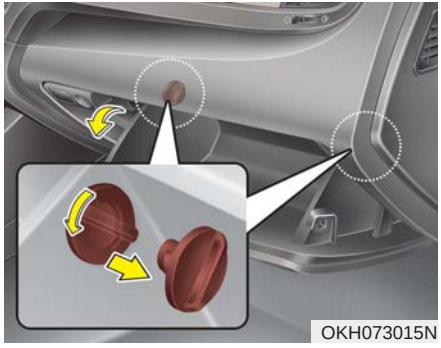
- **Do not drive with the air cleaner removed; this will result in excessive engine wear.**
- **When removing the air cleaner filter, be careful that dust or dirt does not enter the air intake, or damage may result.**
- **Use a Kia genuine part. Use of non-genuine parts could damage the air flow sensor.**

CLIMATE CONTROL AIR FILTER

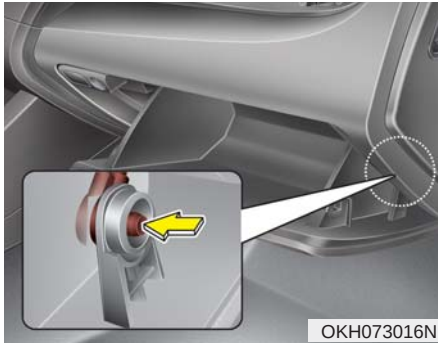
Filter inspection

The climate control air filter should be replaced every 15,000 miles (24,000 km). If the vehicle is operated in severely air-polluted cities or on dusty rough roads for a long period, it should be inspected more frequently and replaced earlier. When you replace the climate control air filter, replace it performing the following procedure, and be careful to avoid damaging other components.

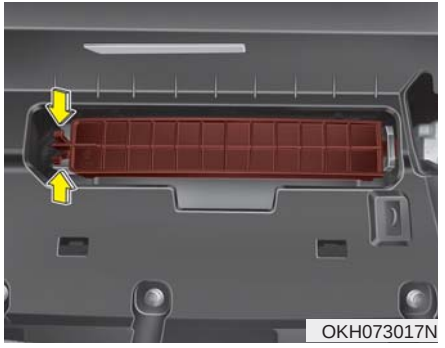
Filter replacement



1. With the glove box open, remove the stoppers on both sides to allow the glove box to hang freely on the hinges.



2. Open the glove box and remove the support strap.


OKH073017N

3.Remove the climate control air filter cover while pressing the lock on the left side of the cover.

OBH078017

4.Replace the climate control air filter.

5.Reassemble in the reverse order of disassembly.

✻ NOTICE

When replacing the climate control air filter install it properly.
Otherwise, the system may produce noise and the effectiveness of the filter may be reduced.

WIPER BLADES

Blade inspection

OKH073073N

✻ NOTICE

Commercial hot waxes applied by automatic car washes have been known to make the windshield difficult to clean.

Contamination of either the windshield or the wiper blades with foreign matter can reduce the effectiveness of the windshield wipers. Common sources of contamination are insects, tree sap, and hot wax treatments used by some commercial car washes. If the blades are not wiping properly, clean both the window and the blades with a good cleaner or mild detergent, and rinse thoroughly with clean water.

⚠ CAUTION

To prevent damage to the wiper blades, do not use gasoline, kerosene, paint thinner, or other solvents on or near them.

Blade replacement

When the wipers no longer clean adequately, the blades may be worn or cracked, and require replacement.

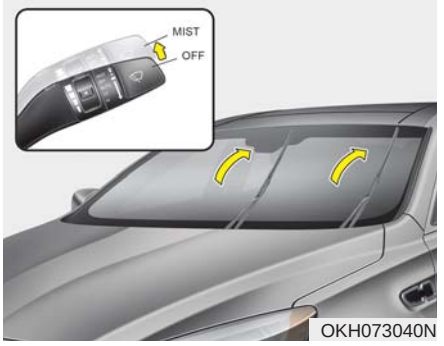
⚠ CAUTION

To prevent damage to the wiper arms or other components, do not attempt to move the wipers manually.

⚠ CAUTION

The use of a non-specified wiper blade could result in wiper malfunction and failure.

Front windshield wiper blade

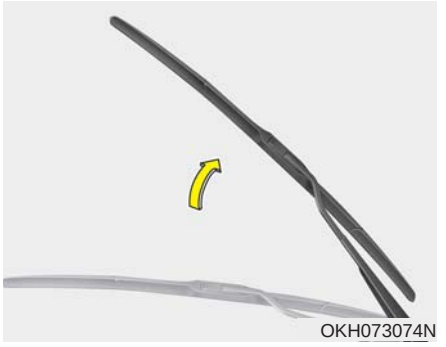


OKH073040N

For your convenience, move the windshield wiper blades to the service position as follows;

Turn off the engine.

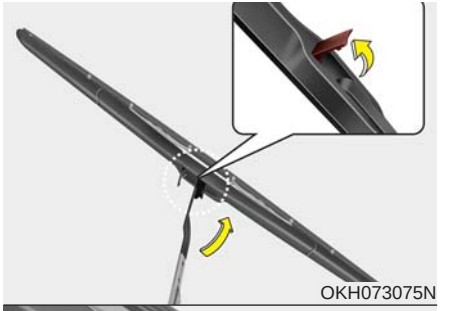
Move the wiper switch to the single wiping (MIST) position within 20 seconds and hold the switch until the wiper blade is in the fully up position.


OKH073074N

1.Raise the wiper arm.

⚠ CAUTION

Do not allow the wiper arm to fall against the windshield, since it may chip or crack the windshield.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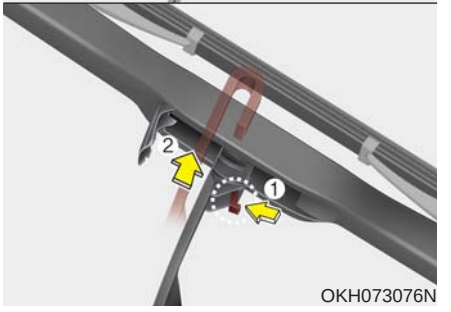

OKH073076N

2.Turn the wiper blade clip. Then lift up the blade clip.

3.Push the clip (1) and push up the wiper arm (2).

4. Push down the wiper arm (3) and install the new blade assembly in the reverse order of removal.
5. Return the wiper arm on the windshield.

BATTERY

For best battery service

OKH073048N

The battery is in the trunk.

- Keep the battery securely mounted.
- Keep the battery top clean and dry.
- Keep the terminals and connections clean, tight, and coated with petroleum jelly or terminal grease.
- Rinse any spilled electrolyte from the battery immediately with a solution of water and baking soda.
- If the vehicle is not going to be used for an extended time, disconnect the battery cables.

⚠ CAUTION

Make sure that the clear tube vent hose is connected between the nipple at the back side of the battery and the vehicle body vent nipple. This ensures that if battery vapors occur that they will exit the vehicle not remain in the trunk.

✻ NOTICE

Basically equipped battery is maintenance free type. If your vehicle is equipped with the battery marked with LOWER and UPPER on the side, you can check the electrolyte level. The electrolyte level should be between LOWER and UPPER. If the electrolyte level is low, it needs to add distilled (demineralized) water (Never add sulfuric acid or other electrolyte). When refill, be careful not to splash the battery and adjacent components. And do not overfill the battery cells. It can cause corrosion on other parts. After then ensure that tighten the cell caps. Have the vehicle checked by an authorized K900 Kia dealer.

⚠ WARNING

■ Battery dangers

Always read the following instructions carefully when handling a battery.

Keep lighted cigarettes and all other flames or sparks away from the battery.

Hydrogen, a highly combustible gas, is always present in battery cells and may explode if ignited.

Keep batteries out of the reach of children because batteries contain highly corrosive SULFURIC ACID. Do not allow battery acid to contact your skin, eyes, clothing or paint finish.

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If any electrolyte gets into your eyes, flush your eyes with clean water for at least 15 minutes and get immediate medical attention. If electrolyte gets on your skin, thoroughly wash the contacted area. If you feel a pain or a burning sensation, get medical attention immediately.

Wear eye protection when charging or working near a battery. Always provide ventilation when working in an enclosed space.

An inappropriately disposed battery can be harmful to the environment and human health. Dispose the battery according to your local law(s) or regulation.

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- **When lifting a plastic-cased battery, excessive pressure on the case may cause battery acid to leak, resulting in personal injury. Lift with a battery carrier or with your hands on opposite corners.**
- **Never attempt to recharge the battery when the battery cables are connected.**
- **The electrical ignition system works with high voltage. Never touch these components with the engine running or the ignition switched on.**

Failure to follow the above warnings can result in serious bodily injury or death.

⚠ CALIFORNIA PROPOSITION 65 WARNING

Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer, birth defects and reproductive harm. Batteries also contain other chemicals known to the State of California to cause cancer. Wash hands after handling.

⚠ CAUTION

- **When you don't use the vehicle for a long time in a low temperature area, disconnect the battery and keep it indoors.**

  The power trunk is not closed completely when the battery is removed. When you remove the battery from the vehicle, refer to "Power trunk" in section 4.
- **Always charge the battery fully to prevent battery case from being damaged in a low temperature area.**
- **If you connect unauthorized electronic devices to the battery, the battery may be discharged. Never use unauthorized devices.**

⚠ WARNING

Removing the battery from the vehicle should be done at an authorized K900 Kia dealer.

Battery recharging by battery charger

Your vehicle has a maintenance-free, calcium-based battery.

- If the battery becomes discharged in a short time (because, for example, the headlights or interior lights were left on while the vehicle was not in use), recharge it by slow charging (trickle) for 10 hours.
- If the battery gradually discharges because of high electric load while the vehicle is being used, recharge it at 20-30A for two hours.

Battery recharging by vehicle

After a jump start from a good battery, run the engine for 20-30 minutes at idle or driving the vehicle before it is shutoff. Vehicle may not restart if you shut it off before the battery had chance to adequately recharge.

⚠ WARNING

■ Recharging battery

When recharging the battery, observe the following precautions:

- **The battery must be removed from the vehicle and placed in an area with good ventilation.**
- **Do not allow cigarettes, sparks, or flame near the battery.**
- **Watch the battery during charging, and stop or reduce the charging rate if the battery cells begin gassing (boiling) violently or if the temperature of the electrolyte of any cell exceeds 120°F (49°C).**
- **Wear eye protection when checking the battery during charging.**
- **Disconnect the battery charger in the following order.**

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1. **Turn off the battery charger main switch.**
2. **Unhook the negative clamp from the negative battery terminal.**
3. **Unhook the positive clamp from the positive battery terminal.**

⚠ WARNING

- **Before performing maintenance or recharging the battery, turn off all accessories and stop the engine.**
- **The negative battery cable must be removed first and installed last when the battery is disconnected.**
- **Operation related to the battery should be done at an authorized K900 Kia dealer.**

⚠ CAUTION

- **Keep the battery away from water or any liquid.**
- **The battery is in the trunk, so you should be careful when you load a container filled with liquid into the trunk.**
- **For your safety, use a genuine Kia approved battery when you replace the battery.**

Reset items

Items should be reset after the battery has been discharged or the battery has been disconnected.

- Auto up/down window (See section 4)
- Sunroof (See section 4)
- Driver position memory system (See section 4)
- Trip computer (See section 4)
- Climate control system (See section 4)
- Clock (See section 4)
- Audio (See section 4)
- Power trunk (See section 4)

TIRES AND WHEELS

Tire care

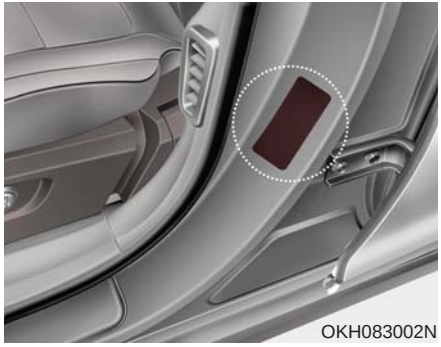
For proper maintenance, safety, and maximum fuel economy, you must always maintain recommended tire inflation pressures and stay within the load limits and weight distribution recommended for your vehicle.

Recommended cold tire inflation pressures

All tire pressures (including the spare) should be checked when the tires are cold. “Cold Tires” means the vehicle has not been driven for at least three hours or driven less than one mile (1.6 km).

Recommended pressures must be maintained for the best ride, vehicle handling, and minimum tire wear.

For recommended inflation pressure, refer to “Tire and wheels” in section 8.



OKH083002N

All specifications (sizes and pressures) can be found on a label attached to the driver’s side center pillar.

⚠ WARNING

■ Tire underinflation

Severe underinflation can lead to severe heat build-up, causing blowouts, tread separation and other tire failures that can result in the loss of vehicle control leading to severe injury or death. This risk is much higher on hot days and when driving for long periods at high speeds.

⚠ CAUTION

- **Underinflation also results in excessive wear, poor handling and reduced fuel economy. Wheel deformation also is possible. Keep your tire pressures at the proper levels. If a tire frequently needs refilling, have it checked by an authorized K900 Kia dealer.**
- **Overinflation produces a harsh ride, excessive wear at the center of the tire tread, and a greater possibility of damage from road hazards.**

⚠ CAUTION

- **Warm tires normally exceed recommended cold tire pressures by 4 to 6 psi (28 to 41 kPa). Do not release air from warm tires to adjust the pressure or the tires will be underinflated.**
- **Be sure to reinstall the tire inflation valve caps. Without the valve cap, dirt or moisture could get into the valve core and cause air leakage. If a valve cap is missing, install a new one as soon as possible.**

⚠ WARNING

■ Tire Inflation

Overinflation or underinflation can reduce tire life, adversely affect vehicle handling, and lead to sudden tire failure. This could result in loss of vehicle control and potential injury.

⚠ CAUTION

■ Tire pressure

Always observe the following:

- **Check tire pressure when the tires are cold. (After vehicle has been parked for at least three hours or hasn't been driven more than one mile (1.6 km) since startup.)**
- **Check the pressure of your spare tire each time you check the pressure of other tires.**
- **Never overload your vehicle. Be careful not to overload a vehicle luggage rack if your vehicle is equipped with one.**
- **Worn, old tires can cause accidents. If your tread is badly worn, or if your tires have been damaged, replace them.**

Checking tire inflation pressure

Check your tires once a month or more.

Also, check the tire pressure of the spare tire.

How to check

Use a good quality gage to check tire pressure. You can not tell if your tires are properly inflated simply by looking at them. Radial tires may look properly inflated even when they're underinflated.

Check the tire's inflation pressure when the tires are cold. - "Cold" means your vehicle has been sitting for at least three hours or driven no more than 1 mile (1.6 km).

Remove the valve cap from the tire valve stem. Press the tire gage firmly onto the valve to get a pressure measurement. If the cold tire inflation pressure matches the recommended pressure on the tire and loading information label, no further adjustment is necessary. If the pressure is low, add air until you reach the recommended amount.

If you overfill the tire, release air by pushing on the metal stem in the center of the tire valve. Recheck the tire pressure with the tire gage. Be sure to put the valve caps back on the valve stems. They help prevent leaks by keeping out dirt and moisture.

⚠ WARNING

- **Inspect your tires frequently for proper inflation as well as wear and damage. Always use a tire pressure gauge.**
- **Tires with too much or too little pressure wear unevenly causing poor handling, loss of vehicle control, and sudden tire failure leading to accidents, injuries, and even death. The recommended cold tire pressure for your vehicle can be found in this manual and on the tire label located on the driver's side center pillar.**
- **Worn tires can cause accidents. Replace tires that are worn, show uneven wear, or are damaged.**
- **Remember to check the pressure of your spare tire. Kia recommends that you check the spare every time you check the pressure of the other tires on your vehicle.**

Tire rotation

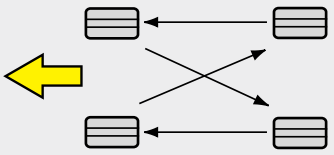
To equalize tread wear, it is recommended that the tires be rotated every 7,500 miles (12,000 km) or sooner if irregular wear develops.

During rotation, check the tires for correct balance.

When rotating tires, check for uneven wear and damage. Abnormal wear is usually caused by incorrect tire pressure, improper wheel alignment, out-of-balance wheels, severe braking or severe cornering. Look for bumps or bulges in the tread or side of tire. Replace the tire if you find either of these conditions. Replace the tire if fabric or cord is visible. After rotation, be sure to bring the front and rear tire pressures to specification and check lug nut tightness.

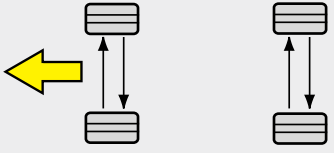
Refer to “Tire and wheels” in section 8.

■ 18 inch tire



OBH078040

■ 19 inch tire



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Disc brake pads should be inspected for wear whenever tires are rotated.

✻ NOTICE

The front tire size is different from the rear tire size. So when you rotate tires, check the tire and wheel size.

⚠ WARNING

- **Do not use the compact spare tire for tire rotation.**
- **Do not mix bias ply and radial ply tires under any circumstances. This may cause unusual handling characteristics that could result in death, severe injury, or property damage.**

Wheel alignment and tire balance

The wheels on your vehicle were aligned and balanced carefully at the factory to give you the longest tire life and best overall performance.

In most cases, you will not need to have your wheels aligned again. However, if you notice unusual tire wear or your vehicle pulling one way or the other, the alignment may need to be reset.

If you notice your vehicle vibrating when driving on a smooth road, your wheels may need to be rebalanced.

⚠ CAUTION

Improper wheel weights can damage your vehicle's aluminum wheels. Use only approved wheel weights.

Tire replacement

If the tire is worn evenly, a tread wear indicator will appear as a solid band across the tread. This shows there is less than 1/16 inch (1.6 mm) of tread left on the tire. Replace the tire when this happens.

Do not wait for the band to appear across the entire tread before replacing the tire.

⚠ WARNING

■ Replacing tires

To reduce the chance of serious or fatal injuries from an accident caused by tire failure or loss of vehicle control:

- **Replace tires that are worn, show uneven wear, or are damaged. Worn tires can cause loss of braking effectiveness, steering control, and traction.**
- **Do not drive your vehicle with too little or too much pressure in your tires. This can lead to uneven wear and tire failure.**
- **When replacing tires, never mix radial and bias-ply tires on the same car. You must replace all tires (including the spare) if moving from radial to bias-ply tires.**

(Continued)

(Continued)

- **Using tires and wheels other than the recommended sizes could cause unusual handling characteristics and poor vehicle control, resulting in a serious accident.**
- **Wheels that do not meet Kia's specifications may fit poorly and result in damage to the vehicle or unusual handling and poor vehicle control.**
- **The ABS works by comparing the speed of the wheels. Tire size can affect wheel speed. When replacing tires, all 4 tires must use the same size originally supplied with the vehicle. Using tires of a different size can cause the ABS (Anti-lock Brake System) and ESC (Electronic Stability Control) to work irregularly.**

Compact spare tire replacement

A compact spare tire has a shorter tread life than a regular size tire. Replace it when you can see the tread wear indicator bars on the tire. The replacement compact spare tire should be the same size and design tire as the one provided with your new vehicle and should be mounted on the same compact spare tire wheel. The compact spare tire is not designed to be mounted on a regular size wheel, and the compact spare tire wheel is not designed for mounting a regular size tire.

⚠ WARNING

The compact spare tire is for emergency use only. Do not operate your vehicle on this compact spare at speeds over 50 mph (80 km/h). The original tire should be repaired or replaced as soon as possible to avoid failure of the spare possibly leading to personal injury or death.

Wheel replacement

When replacing the metal wheels for any reason, make sure the new wheels are equivalent to the original factory units in diameter, rim width and offset.

✻ NOTICE

The front tire size is different from the rear tire size. So when you rotate tires, check the tire and wheel size.

⚠ WARNING

A wheel that is not the correct size may adversely affect wheel and bearing life, braking and stopping abilities, handling characteristics, ground clearance, body-to-tire clearance, snow chain clearance, speedometer and odometer calibration, headlight aim and bumper height.

Tire traction

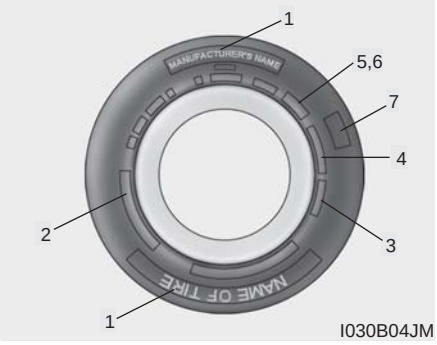
Tire traction can be reduced if you drive on worn tires, tires that are improperly inflated or on slippery road surfaces. Tires should be replaced when tread wear indicators appear. To reduce the possibility of losing control, slow down whenever there is rain, snow or ice on the road.

Tire maintenance

In addition to proper inflation, correct wheel alignment helps to decrease tire wear. If you find a tire is worn unevenly, have your dealer check the wheel alignment.

When you have new tires installed, make sure they are balanced. This will increase vehicle ride comfort and tire life. Additionally, a tire should always be rebalanced if it is removed from the wheel.

Tire sidewall labeling



This information identifies and describes the fundamental characteristics of the tire and also provides the tire identification number (TIN) for safety standard certification. The TIN can be used to identify the tire in case of a recall.

1. Manufacturer or brand name

Manufacturer or Brand name is shown.

2. Tire size designation

A tire's sidewall is marked with a tire size designation. You will need this information when selecting replacement tires for your car. The following explains what the letters and numbers in the tire size designation mean.

Example tire size designation:

(These numbers are provided as an example only; your tire size designator could vary depending on your vehicle.)

P245/45R19 98V

P- Applicable vehicle type (tires marked with the prefix "P" are intended for use on passenger cars or light trucks; however, not all tires have this marking).

245 - Tire width in millimeters.

45 - Aspect ratio. The tire's section height as a percentage of its width.

R - Tire construction code (Radial).

19 - Rim diameter in inches.

98 - Load Index, a numerical code associated with the maximum load the tire can carry.

V - Speed Rating Symbol. See the speed rating chart in this section for additional information.

Wheel size designation

Wheels are also marked with important information that you need if you ever have to replace one. The following explains what the letters and numbers in the wheel size designation mean.

Example wheel size designation:

8.0JX19

8.0 - Rim width in inches.

J - Rim contour designation.

19 - Rim diameter in inches.

Tire speed ratings

The chart below lists many of the different speed ratings currently being used for passenger car tires. The speed rating is part of the tire size designation on the sidewall of the tire. This symbol corresponds to that tire's designed maximum safe operating speed.

Speed Rating Symbol	Maximum Speed
S	112 mph (180 km/h)
T	118 mph (190 km/h)
H	130 mph (210 km/h)
V	149 mph (240 km/h)
Z	Above 149 mph (240 km/h)

3. Checking tire life (TIN : Tire Identification Number)

Any tires that are over 6 years old, based on the manufacturing date, (including the spare tire) should be replaced by new ones. You can find the manufacturing date on the tire sidewall (possibly on the inside of the wheel), displaying the DOT Code. The DOT Code is a series of numbers on a tire consisting of numbers and English letters. The manufacturing date is designated by the last four digits (characters) of the DOT code.

DOT : XXXX XXXX OOOO

The front part of the DOT means a plant code number, tire size and tread pattern and the last four numbers indicate week and year manufactured.

For example:

DOT XXXX XXXX 1614 represents that the tire was produced in the 16th week of 2014.

⚠ WARNING

■ Tire age

Tires degrade over time, even when they are not being used.

Regardless of the remaining tread, it is recommended that tires generally be replaced after six (6) years of normal service. Heat caused by hot climates or frequent high loading conditions can accelerate the aging process. Failure to follow this warning can result in sudden tire failure, which could lead to a loss of control and an accident involving serious injury or death.

4. Tire ply composition and material

The number of layers or plies of rubber-coated fabric in the tire. Tire manufacturers also must indicate the materials in the tire, which include steel, nylon, polyester, and others. The letter "R" means radial ply construction; the letter "D" means diagonal or bias ply construction; and the letter "B" means belted-bias ply construction.

5. Maximum permissible inflation pressure

This number is the greatest amount of air pressure that should be put in the tire. Do not exceed the maximum permissible inflation pressure. Refer to the Tire and Loading Information label for recommended inflation pressure.

6. Maximum load rating

This number indicates the maximum load in kilograms and pounds that can be carried by the tire. When replacing the tires on the vehicle, always use a tire that has the same load rating as the factory installed tire.

7. Uniform tire quality grading

Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width.

For example: TREAD wear 200

TRACTION AA

TEMPERATURE A

Tread wear

The tread wear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one-and-a-half times (1½) as well on the government course as a tire graded 100.

The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

These grades are molded on the side-walls of passenger vehicle tires. The tires available as standard or optional equipment on your vehicle may vary with respect to grade.

Traction - AA, A, B & C

The traction grades, from highest to lowest, are AA, A, B and C. Those grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

⚠ WARNING

The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning, or peak traction characteristics.

Temperature -A, B & C

The temperature grades are A (the highest), B and C representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

⚠ WARNING

■ Tire temperature

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat build-up and possible sudden tire failure. This can cause loss of vehicle control and serious injury or death.

Low aspect ratio tire (if equipped)

Low aspect ratio tires, whose aspect ratio is lower than 50, are provided for sporty looks.

Because the low aspect ratio tires are optimized for handling and braking, it may be more uncomfortable to ride in and there is more noise compare with normal tires.

⚠ CAUTION

Because the sidewall of the low aspect ratio tire is shorter than the normal, the wheel and tire of the low aspect ratio tire is easier to be damaged. So, follow the instructions below.

- **When driving on a rough road or off road, drive cautiously because tires and wheels may be damaged. And after driving, inspect tires and wheels.**
- **When passing over a pothole, speed bump, manhole, or curb stone, drive slowly so that the tires and wheels are not damaged.**
- **If the tire is impacted, inspect the tire condition or contact an authorized K900 Kia dealer.**
- **To prevent damage to the tire, inspect the tire condition and pressure every 1,800 miles (3,000 km).**

⚠ CAUTION

- **It is not easy to recognize the tire damage with your own eyes. But if there is the slightest hint of tire damage, even though you cannot see the tire damage with your own eyes, have the tire checked or replaced because the tire damage may cause air leakage from the tire.**
- **If the tire is damaged by driving on a rough road, off road, pothole, manhole, or curb stone, it will not be covered by the warranty.**
- **You can find out the tire information on the tire sidewall.**

Tire terminology and definitions

Air Pressure: The amount of air inside the tire pressing outward on the tire. Air pressure is expressed in pounds per square inch (psi) or kilopascal (kPa).

Accessory Weight: This means the combined weight of optional accessories. Some examples of optional accessories are, automatic transmission, power seats, and air conditioning.

Aspect Ratio: The relationship of a tire's height to its width.

Belt: A rubber coated layer of cords that is located between the plies and the tread. Cords may be made from steel or other reinforcing materials.

Bead: The tire bead contains steel wires wrapped by steel cords that hold the tire onto the rim.

Bias Ply Tire: A pneumatic tire in which the plies are laid at alternate angles less than 90 degrees to the centerline of the tread.

Cold Tire Pressure: The amount of air pressure in a tire, measured in pounds per square inch (psi) or kilopascals (kPa) before a tire has built up heat from driving.

Curb Weight: This means the weight of a motor vehicle with standard and optional equipment including the maximum capacity of fuel, oil and coolant, but without passengers and cargo.

DOT Markings: A code molded into the sidewall of a tire signifying that the tire is in compliance with the U.S. Department of Transportation motor vehicle safety standards. The DOT code includes the Tire Identification Number (TIN), an alphanumeric designator which can also identify the tire manufacturer, production plant, brand and date of production.

GVWR: Gross Vehicle Weight Rating

GAWR FRT: Gross Axle Weight Rating for the Front Axle.

GAWR RR: Gross Axle Weight Rating for the Rear axle.

Intended Outboard Sidewall: The side of an asymmetrical tire, that must always face outward when mounted on a vehicle.

Kilopascal (kPa): The metric unit for air pressure.

Load Index: An assigned number ranging from 1 to 279 that corresponds to the load carrying capacity of a tire.

Maximum Inflation Pressure: The maximum air pressure to which a cold tire may be inflated. The maximum air pressure is molded onto the sidewall.

Maximum Load Rating: The load rating for a tire at the maximum permissible inflation pressure for that tire.

Maximum Loaded Vehicle Weight: The sum of curb weight; accessory weight; vehicle capacity weight; and production options weight.

Normal Occupant Weight: The number of occupants a vehicle is designed to seat multiplied by 150 pounds (68 kg).

Occupant Distribution: Designated seating positions.

Outward Facing Sidewall: The side of a asymmetrical tire that has a particular side that faces outward when mounted on a vehicle. The outward facing sidewall bears white lettering or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same moldings on the inner facing sidewall.

Passenger (P-Metric) Tire: A tire used on passenger cars and some light duty trucks and multipurpose vehicles.

Recommended Inflation Pressure: Vehicle manufacturer's recommended tire inflation pressure and shown on the tire placard.

Radial Ply Tire: A pneumatic tire in which the ply cords that extend to the beads are laid at 90 degrees to the centerline of the tread.

Rim: A metal support for a tire and upon which the tire beads are seated.

Sidewall: The portion of a tire between the tread and the bead.

Speed Rating: An alphanumeric code assigned to a tire indicating the maximum speed at which a tire can operate.

Traction: The friction between the tire and the road surface. The amount of grip provided.

Tread: The portion of a tire that comes into contact with the road.

Treadwear Indicators: Narrow bands, sometimes called "wear bars," that show across the tread of a tire when only 2/32 inch of tread remains.

UTQGS: Uniform Tire Quality Grading Standards, a tire information system that provides consumers with ratings for a tire's traction, temperature and treadwear. Ratings are determined by tire manufacturers using government testing procedures. The ratings are molded into the sidewall of the tire.

Vehicle Capacity Weight: The number of designated seating positions multiplied by 150 lbs. (68 kg) plus the rated cargo and luggage load.

Vehicle Maximum Load on the Tire: Load on an individual tire due to curb and accessory weight plus maximum occupant and cargo weight.

Vehicle Normal Load on the Tire: Load on an individual tire that is determined by distributing to each axle its share of the curb weight, accessory weight, and normal occupant weight and dividing by 2.

Vehicle Placard: A label permanently attached to a vehicle showing the original equipment tire size and recommended inflation pressure.

All season tires

Kia specifies all season tires on some models to provide good performance for use all year round, including snowy and icy road conditions. All season tires are identified by ALL SEASON and/or M+S (Mud and Snow) on the tire sidewall. Snow tires have better snow traction than all season tires and may be more appropriate in some areas.

Summer tires

Kia specifies summer tires on some models to provide superior performance on dry roads. Summer tire performance is substantially reduced in snow and ice. Summer tires do not have the tire traction rating M+S (Mud and Snow) on the tire side wall. If you plan to operate your vehicle in snowy or icy conditions, Kia recommends the use of snow tires or all season tires on all four wheels.

Snow tires

If you equip your car with snow tires, they should be the same size and have the same load capacity as the original tires. Snow tires should be installed on all four wheels; otherwise, poor handling may result.

Snow tires should carry 4 psi (28 kPa) more air pressure than the pressure recommended for the standard tires on the tire label on the driver's side of the center pillar, or up to the maximum pressure shown on the tire sidewall, whichever is less.

Do not drive faster than 75 mph (120 km/h) when your car is equipped with snow tires.

⚠ WARNING

■ **Snow or ice**

- **When driving on roads covered with snow or ice, drive at less than 20 mph (30 km/h).**
- **Do not use tire chains on vehicles equipped with aluminum wheels.**
- **If snow chains must be used, use the Auto Sock® (fabric snow chain).**
- **If you hear noise caused by chains contacting the body, retighten the chain to avoid contact with the vehicle body.**
- **To prevent body damage, retighten the chains after driving 0.3~0.6 miles (0.5~1.0 km).**

* Auto Sock® is a trade mark of Auto sock.

Tire chains

Tire chains, if necessary, should be installed on the drive wheels (rear wheels).

Be sure that the chains are installed in accordance with the manufacturer's instructions.

To minimize tire and chain wear, do not continue to use tire chains when they are no longer needed.

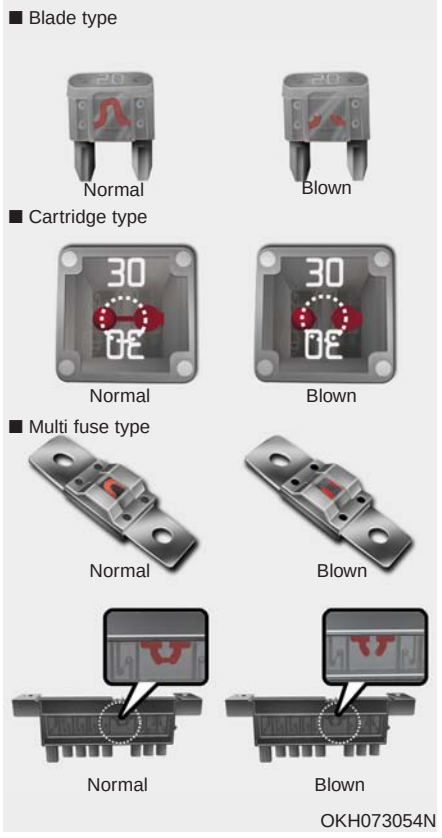
Radial-ply tires

Radial-ply tires provide improved tread life, road hazard resistance and smoother high speed ride. The radial-ply tires used on this vehicle are of belted construction, and are selected to complement the ride and handling characteristics of your vehicle. Radial-ply tires have the same load carrying capacity, as bias-ply or bias belted tires of the same size, and use the same recommended inflation pressure. Mixing of radial-ply tires with bias-ply or bias belted tires is not recommended.

Any combinations of radial-ply and bias-ply or bias belted tires when used on the same vehicle will seriously deteriorate vehicle handling. The best rule to follow is: Identical radial-ply tires should always be used as a set of four.

Longer wearing tires can be more susceptible to irregular tread wear. It is very important to follow the tire rotation interval shown in this section to achieve the tread life potential of these tires. Cuts and punctures in radial-ply tires are repairable only in the tread area, because of sidewall flexing. Consult your tire dealer for radial-ply tire repairs.

FUSES



A vehicle's electrical system is protected from electrical overload damage by fuses.

This vehicle has 2 fuse panels, one located in the driver's side panel bolster, another is in the engine compartment.

If any of your vehicle's lights, accessories, or controls do not work, check the appropriate circuit fuse. If a fuse has blown, the element inside the fuse will be melted.

If the electrical system does not work, first check the driver's side fuse panel.

Before replacing a blown fuse, disconnect the negative battery cable.

Always replace a blown fuse with one of the same rating.

If the replacement fuse blows, this indicates an electrical problem. Avoid using the system involved and immediately consult an authorized K900 Kia dealer.

Three kinds of fuses are used: blade type for lower amperage rating, cartridge type, and fusible link for higher amperage ratings.

⚠ WARNING

■ Fuse replacement

- **Never replace a fuse with anything but another fuse of the same rating.**
- **A higher capacity fuse could cause damage and possibly a fire.**
- **Never install a wire or aluminum foil instead of the proper fuse - even as a temporary repair. It may cause extensive wiring damage and a possible fire.**

⚠ CAUTION

Do not use a screwdriver or any other metal object to remove fuses because it may cause a short circuit and damage the system.

✻ NOTICE

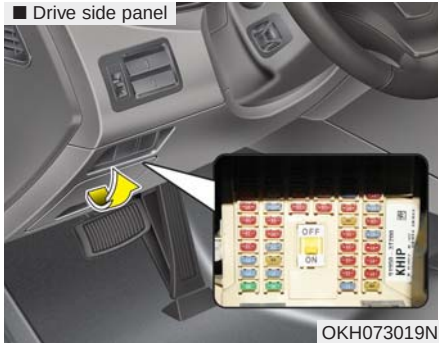
The actual fuse/relay panel label may differ from equipped items.

⚠ CAUTION

- **When replacing a blown fuse or relay with a new one, make sure the new fuse or relay fits tightly into the clips The incomplete fastening fuse or relay may cause the vehicle wiring and electric systems damage and a possible fire.**
- **Do not remove fuses, relays and terminals fastened with bolts or nuts. The fuses, relays and terminals may be fastened incompletely, and it may cause a possible fire. If fuses, relays and terminals fastened with bolts or nuts are blown, consult an authorized K900 Kia dealer.**
- **Do not input any other objects except fuses or relays into fuse/relay terminals such as a driver or wiring. It may cause contact failure and system malfunction.**

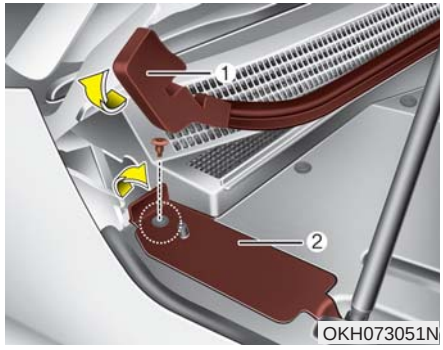
Instrument panel fuse replacement

■ Drive side panel



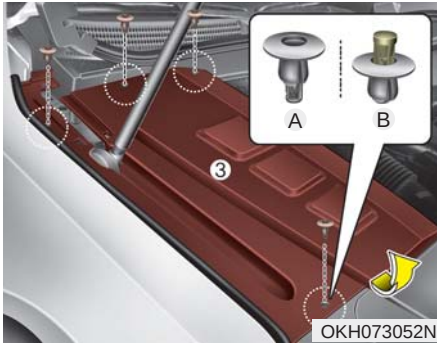
OKH073019N

1. Turn the ignition switch and all other switches off.



OKH073051N

2. Lift the end of strip (1) up.
3. Press the fastener head with screw driver and then pull the fastener out.
4. Lift the rear portion of small service cover (2) up and then remove the service cover.



(A) : for assemble

(B) : for remove

5. Press the fastener head with screw driver and then pull the fastener out from main service cover (3).
6. Pull the main service cover over 7mm (0.28 in) to toward the front of the vehicle.
7. Lift the main service cover up and then remove the main service cover. Be careful not to damage the holder under the main service cover.
8. Open the fuse panel cover.
9. Pull the suspected fuse straight out. Use the fuse puller provided in the engine compartment fuse panel.
10. Check the removed fuse; replace it if it is blown.
11. Push in a new fuse of the same rating, and make sure it fits tightly in the clips.

If it fits loosely, consult an authorized K900 Kia dealer.

If you do not have a spare, use a fuse of the same rating from a circuit you may not need for operating the vehicle, such as the cigarette lighter fuse.

If the headlights or other electrical components do not work and the fuses are OK, check the fuse panel in the engine compartment. If a fuse is blown, it must be replaced.

Fuse switch

Always put the transportation fuse switch at the ON position.

If you move the switch to the OFF position, some items such as the audio and digital clock must be reset and the smart key may not work properly.

⚠ CAUTION

- **Always place the transportation fuse switch in the ON position while driving the vehicle.**
- **Do not move the transportation fuse switch repeatedly. The fuse switch may be worn out.**

✻ NOTICE

If you need to park your vehicle for prolonged periods more than 1 month, move the transportation fuse switch to the OFF position to prevent the battery being discharged.

Engine compartment fuse replacement

OKH073022N

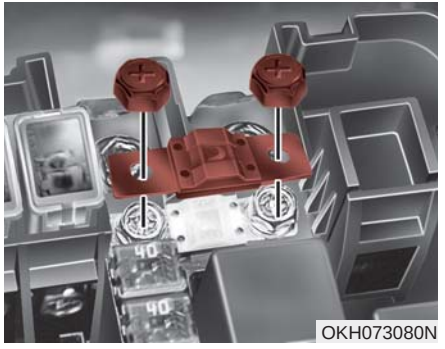
OKH073023N

1. Turn the ignition switch and all other switches off.
2. Remove the fuse panel cover by pressing the tab and pulling up.
3. Check the removed fuse; replace it if it is blown. To remove or insert the fuse, use the fuse puller in the engine compartment fuse panel.
4. Push in a new fuse of the same rating, and make sure it fits tightly in the clips. If it fits loosely, consult an authorized K900 Kia dealer.

⚠ CAUTION

After checking the fuse panel in the engine compartment, securely install the fuse panel cover. If not, electrical failures may occur from water contact.

Main fuse



OKH073080N

If the main fuse is blown, it must be removed as follows:

1. Remove the fuse panel cover on the right side in the engine compartment.
2. Remove the nuts shown in the picture above.
3. Replace the fuse with a new one of the same rating.
4. Reinstall in the reverse order of removal.

✻ NOTICE

If the main fuse is blown, consult an authorized K900 Kia dealer.

Multi fuse

OKH073024N

If the multi fuse is blown, it must be removed as follows:

1. Disassemble the negative cable of battery.
2. Remove the nuts shown in the picture above.
3. Replace the fuse with a new one of the same rating.
4. Reinstall in the reverse order of removal.

✻ NOTICE

If the multi fuse is blown, consult an authorized K900 Kia dealer.

Fuse/relay panel description

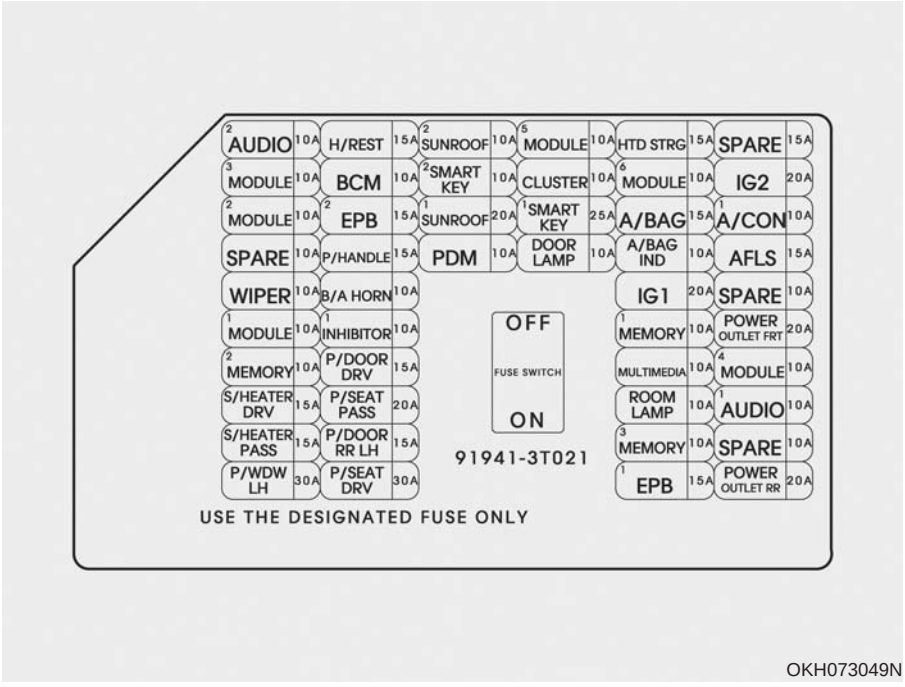
Instrument panel fuse panel

OKH073029N

Inside the fuse/relay panel covers, you can find the fuse/relay label describing fuse/relay name and capacity.

✻ NOTICE

Not all fuse panel descriptions in this manual may be applicable to your vehicle. It is accurate at the time of printing. When you inspect the fuse panel in your vehicle, refer to the fuse panel label.



OKH073049N

Fuse Name	Fuse rasting	Circuit Protected
AUDIO 2	10A	A/V & Navigation Head Unit, TMU
MODULE 3	10A	A/C Control Module, Electro Chromic Mirror, Rear Seat Console Switch, Driver Haptic Control Module, Rear CCS Control Module LH/RH, Driver/Passenger IMS Control Module, Driver Power Seat Module, Rear Seat Warmer Control Module LH/RH, Rear Smart Junction Box (IPS Control Module)
MODULE 2	10A	Steering Tilt & Telescopic Module, LDWS Camera Module, Crash Pad Switch, Stop Lamp Switch, A/T Console Switch, Electric Parking Brake Switch, Console Switch, Smart Cruse Control Radar, Air Sus, TPMS, PAS
SPARE	10A	Spare
WIPER	10A	Auto Light & Rain Sensor
MODULE 1	10A	BCM, Trunk Lid Main Switch, Low Panel Switch
MEMORY 2	10A	External Buzzer, Driver Smart Connector, Passenger Smart Connector
DRV HEAT	15A	Driver Haptic Control Module, Driver CCS Module
PASS HEAT	15A	Passenger CCS Module
WINDOW LH	30A	Rear Power Window Module LH, Rear Power Window Module LH
HEADREST	15A	Active Headrest Sensor
BCM	10A	BCM, Multifunction Switch, Driver/Passenger Power Seat Switch, Rear Door Module LH/RH
EPB 2	15A	Electric Parking Brake Module
P/HANDLE	15A	Steering Tilt & Telescopic Module

Fuse Name	Fuse rasting	Circuit Protected
B/ALARM	10A	BCM
INHIBITOR 1	10A	W/O Electric ATM Shift Lever : Sport Mode Switch With Electric ATM Shift Lever : Electric ATM Shift Lever
P/DOOR DRV	15A	Driver Door Latch
PASS P/SEAT	20A	W/O IMS : Passenger Seat Relay Box With IMS : Passenger IMS Control Module
P/DOOR RR LH	15A	Rear Door Latch LH
DRV P/SEAT	30A	Driver Lumbar Support Valve, Driver Lumbar Support Switch, Driver Power Seat Module
S/ROOF 2	10A	Sunroof Motor
SMART KEY 2	10A	Metal Core Block (PCB #2) (P/N Relay), Smart Key Control Module
S/ROOF 1	20A	Sunroof Motor
START	10A	Start/Stop Button Switch
MODULE 5	10A	Surround View Unit, Parking Guide Unit, Head-UP, Instrument Cluster, Driver Lumbar Support Valve, Rear Seat Console Switch, Rear Seat Warmer Control Module LH/RH, Rear Massage Control Module LH/RH, Rear Smart Junction Box (IPS Control Module)
CLUSTER	10A	Instrument Cluster, Head-Up Display
SMART KEY 1	25A	Smart Key Control Module
DOOR LAMP	10A	Driver Door Module, Passenger Door Module
STR'G HTD	15A	Clock Spring

Fuse Name	Fuse rasting	Circuit Protected
MODULE 6	10A	Smart Key Control Module, BCM
A/BAG	15A	Driver Seat Belt Pretensioner, Passenger Seat Belt Pretensioner, SRS Control Module
A/BAG IND	10A	Instrument Cluster
IGN 1	20A	E/R Fuse & Relay Box LH (FUSE : F20, F21, F23, F25, F26, F27)
MEMORY 1	10A	Passenger IMS Control Module, Driver/Passenger Door Module, Driver/Passenger Power Seat Switch, Rear Door Module LH/RH, Power Trunk Module, Instrument Cluster, BCM, Security Sensor, Analogue Clock, A/C Control Module, Head-Up Display
MULTI MEDIA	10A	Keyboard, A/V Navigation Head Unit, Front Monitor, TMU
ROOM LAMP	10A	Rear Seat Foot Lamp LH/RH, Trunk Room Lamp LH/RH, Driver/Passenger Foot Lamp, Room Lamp, Overhead Console Lamp, Front Vanity Lamp Switch LH/RH, Rear Vanity Lamp Switch LH/RH, Garnish Lamp LH/RH, Garnish Center Lamp, Glove Box Lamp
MEMORY 3	10A	RF Receiver
EPB 1	15A	Electric Parking Brake Module
SPARE	15A	Spare
IGN 2	20A	E/R Fuse & Relay Box LH (Fuse : F29, F30)
A/CON 1	10A	A/C Control Module, Ionizer, Metal Core Block (PCB #2) (Blower Relay)
AFLS	15A	Adaptive Front Lighting Module, HEAD LAMP LH/RH
SPARE	10A	Spare
P/OUTLET FR	20A	Front Cigarette Lighter

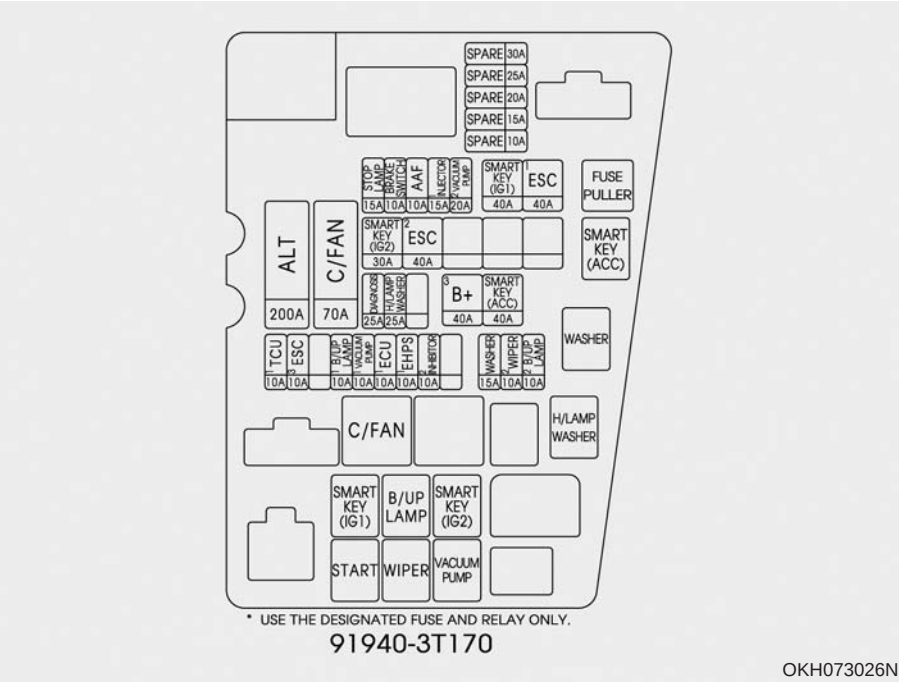
Fuse Name	Fuse rasting	Circuit Protected
MODULE 4	10A	Electric ATM Shift Lever, Analogue Clock, BCM, Surround View Unit, Overhead Console Lamp, Parking Guide Unit
AUDIO 1	10A	A/V & Navigation Head Unit, Front/Rear Monitor Module, Keyboard, Smart Key Control Module, Rear Seat Audio Switch, AMP, TMU
SPARE	10A	Spare
P/OUTLET RR	20A	P/OUTLET RR, Front Power Outlet

Engine compartment fuse panel (Driver's side)

OKH073025N

✻ NOTICE

Not all fuse panel descriptions in this manual may be applicable to your vehicle. It is accurate at the time of printing. When you inspect the fuse panel in your vehicle, refer to the fuse panel label.



OKH073026N

Fuse Name	Fuse rasting	Circuit Protected
Stop Lamp	15A	Stop Signal Electronic Module
Brake SW	10A	Stop Lamp Switch, Smart Key Control Module
AAF	10A	Not Used
Injector 1	15A	Injector Drive Box
SMK (IGN1)	40A	E/R Fuse & Relay Box LH (RLY.5)
ESC 1	40A	ESC Control Module
ALT	200A	E/R Fuse & Relay Box LH (Fuse : F9, F15, F16, F18, F19), Alternator
Cooling	70A	E/R Fuse & Relay Box LH (RLY.6)
SMK (IGN2)	30A	E/R Fuse & Relay Box LH (RLY.3)
ESC 2	40A	ESC Control Module
Diagnosis	25A	Multipurpose Check Connector
H/Lamp Washer	25A	Not Used
Battery 3	40A	Smart Junction Box (Fuse : F5, F6, F8, F9, F10)
SMK (ACC)	40A	E/R Fuse & Relay Box LH (RLY.9)
TCU 1	10A	ECM, Transmission Range Switch, Transmission Park Postilion Sensor & Switch
ESC 3	10A	Steering Angle Sensor, ESC Control Module
B/UP Lamp 1	10A	E/R Fuse & Relay Box LH (RLY.4)

Fuse Name	Fuse rasting	Circuit Protected
Vaccum Pump 1	10A	E/R Fuse & Relay Box LH (RLY.10), Vaccum Pump Switch
ECU 1	10A	ECU
EHPS 1	10A	EHPS Module
Inhibitor 2	10A	A/T Console Switch, Electric ATM Shift Lever
Washer	15A	E/R Fuse & Relay Box LH (RLY.8)
Wiper 2	10A	E/R Fuse & Relay Box LH (RLY.1)
B/UP Lamp 2	10A	Back View Camera & Back-Up Lamp, A/T Console Switch, Electro Chromic Mirror, A/V & Navigation Head Unit
Vaccum Pump 2	20A	E/R Fuse & Relay Box LH (RLY.10)

Engine compartment fuse panel (Passenger's side)

OKH073027N

✻ NOTICE

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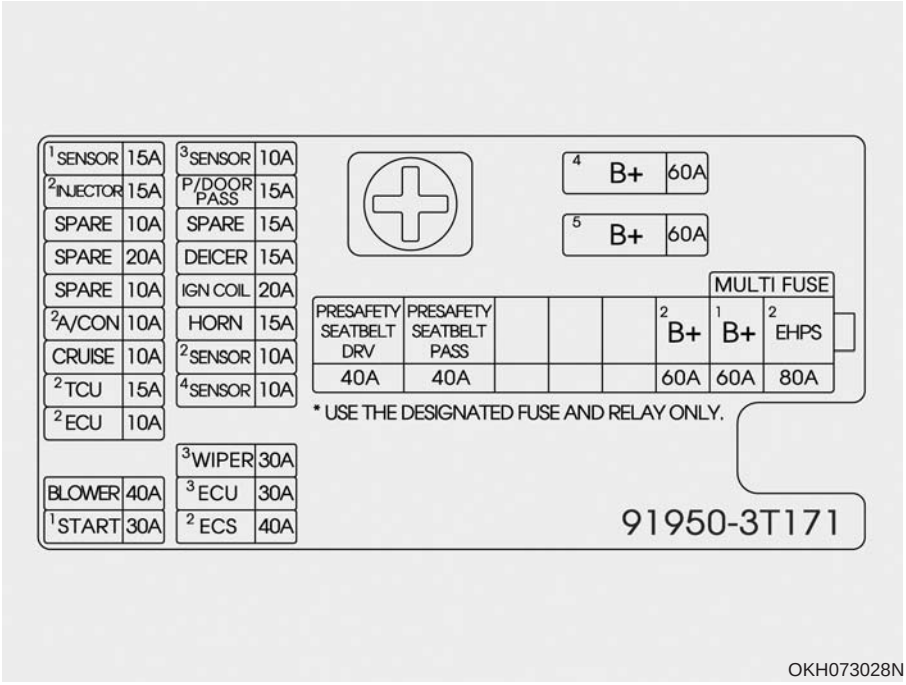


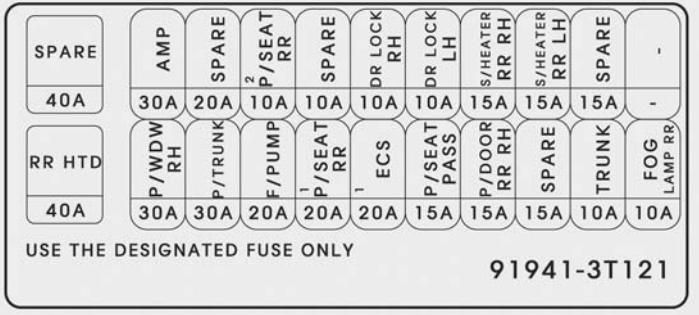
OKH073028N

Fuse	Fuse Name	Fuse rasting	Circuit Protected
METAL CORE BLOCK (PCB #1)	Sensor 3	10A	Rear Smart Junction Box (Fuel Pump Relay)
	P/Door PASS	15A	Passenger Door Latch
	SPARE	15A	Spare
	Deicer	15A	Metal Core Block (PCB #1) (Front Deicer Relay), Ignition Coil #1~8
	Ignition Coil	20A	Ignition Coil #1~6, Condenser #1, #2
	Horn	15A	Metal Core Block (PCB #1) (Horn Relay)
	Sensor 2	10A	Mass Air Flow Sensor, Oxygen Sensor #1~4, E/R Fuse & Relay Box LH (RLY.6)
	Sensor 4	15A	CMP Sensor #1~4
	Wiper 3	30A	Wiper Motor
	ECU 3	30A	Metal Core Block (PCB #1) (ECU Main Relay)
	ECS 2	40A	Metal Core Block (PCB #1) (Air ECS Relay)
METAL CORE BLOCK (PCB #2)	Sensor 1	15A	Purge Control Solenoid Valve, ECM, Variable Intake Solenoid Valve, Oil Control Valve #1~4
	Injector 2	15A	Injector #1~6, Injector #1~8
	SPARE	10A	Spare
	SPARE	20A	Spare
	SPARE	10A	Spare

Fuse	Fuse Name	Fuse rasting	Circuit Protected
METAL CORE BLOCK (PCB #2)	A/CON 2	10A	A/C Control Module
	Cruise	10A	Smart Cruise Control Radar
	TCU 2	15A	TCM
	ECU 2	10A	ECM
	Blower	40A	Metal Core Block(PCB) (Blower Relay)
	Start 1	30A	E/R Fuse Relay Box LH (RLY.2)
MULTI FUSE	Presafety Seat Belt DRV	40A	Driver Seat Belt Pretensioner
	Presafety Seat Belt PASS	40A	Passenger Seat Belt Pretensioner
	Battery 2	60A	Smart Junction Box (Fuse : F13~20, F23, F24, F27, F28, IPS5~8, Arisu-LT2)
	Battery 1	60A	Smart Junction Box (Fuse : F38, IPS1, 3, Arisu-LT1, Leak Current Autocut Device)
	EHPS 2	80A	EHPS Module
FUSE	Battery 4	60A	Metal Core Block (PCB #1) (Fuse : F2, F4, F6, F10, F11, F12)
	Battery 5	60A	Metal Core Block (PCB #2) (Fuse : F7, F11)

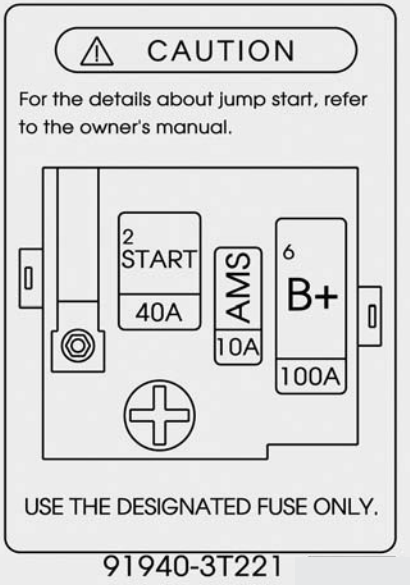
Trunk fuse panel

OKH073041N



OKH073042N

• **Battery box fuse panel**



OKH073043N

✻ NOTICE

Not all fuse panel descriptions in this manual may be applicable to your vehicle. It is accurate at the time of printing. When you inspect the fuse panel in your vehicle, refer to the fuse panel label.

Trunk fuse panel

Fuse Name	Fuse rasting	Circuit Protected
Rear HTD	40A	Rear Defogger Relay
P/WDW RH	30A	Passenger Power Window Module, Rear Power Window Module RH
P/Trunk	30A	Power Trunk Module
F/Pump	20A	Fuel Pump Relay
P/Seat RR 1	20A	Rear Seat Relay Box
ECS 1	20A	ECS Unit
P/Seat PASS	15A	Passenger IMS Control Module
P/Door RR RH	15A	Rear Door Latch RH
Spare	15A	Spare
Trunk	10A	Trunk Lid Relay, Power Trunk Module Buzzer
Fog Lamp RR	10A	Rear Fog Lamp Relay
Spare	40A	Spare
AMP	30A	AMP
Spare	20A	Spare
P/Seat RR 2	10A	Rear Seat Relay Box LH, Rear Seat Relay RH, Rear Seat Massage Control Module LH, Rear Seat Massage Control Module RH
Spare	10A	Spare

Fuse Name	Fuse rasting	Circuit Protected
DR Lock RH	10A	Passenger Door Module, Rear Door Module RH
DR Lock LH	10A	Driver Door Module, Rear Door Latch LH
S/Heater RR RH	15A	Rear Seat Warmer Control Module RH, Rear CCS Control Module RH
S/Heater RR LH	15A	Rear Seat Warmer Control Module LH, Rear CCS Control Module LH
Spare	15A	Spare

Battery box fuse panel

Fuse Name	Fuse rasting	Circuit Protected
Start 2	40A	Metal Core Block (PCB #2) (Fuse : F8, F9, F12)
AMS	10A	Battery Sensor
Battery 6	100A	Rear Smart Junction Box (Fuse : F1, F2, F3, F4, F5, F6, F7, F8, F10, F11, F13, F15, F17, F18, F19, F20)

LIGHT BULBS

⚠ WARNING

■ Working on the lights

Prior to working on the light, firmly apply the parking brake, ensure that the ignition switch is turned to the LOCK position and turn off the lights to avoid sudden movement of the vehicle and burning your fingers or receiving an electric shock.

Use only the bulbs of the specified wattage.

⚠ CAUTION

Be sure to replace the burned-out bulb with one of the same wattage rating. Otherwise, it may cause damage to the fuse or electric wiring system.

⚠ CAUTION

- **If you don't have necessary tools, the correct bulbs and the expertise, consult an authorized K900 Kia dealer. In many cases, it is difficult to replace vehicle light bulbs because other parts of the vehicle must be removed before you can get to the bulb. This is especially true if you have to remove the headlight assembly to get to the bulb(s).**

  Removing/installing the headlight assembly can result in damage to the vehicle.
- **Do not install additional bulb or LED. If you install that, the lamp may not be operated properly and fuse box or electric wiring system may have problem.**

✻ NOTICE

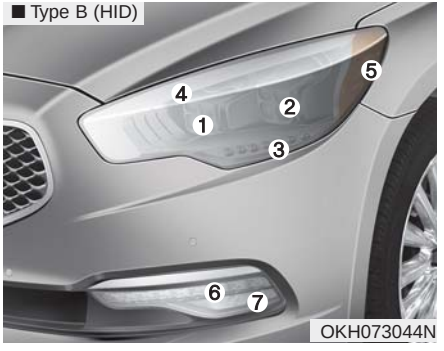
After heavy, driving rain or washing, headlight and taillight lenses could appear frosty. This condition is caused by the temperature difference between the lamp inside and outside. This is similar to the condensation on your windows inside your vehicle during the rain and doesn't indicate a problem with your vehicle. If the water leaks into the lamp bulb circuitry, have the vehicle checked by an authorized K900 Kia dealer.

Headlight, front position light, front turn signal light, front fog light bulb replacement

■ Type A (LED)

OKH073044N

■ Type B (HID)



OKH073044N

(1) Headlight (High)
(2) Headlight (Low)
(3) Front turn signal light
(4) Front position light
(5) Front side marker light
(6) Daytime running light
(7) Front fog light

Headlight bulb

OKH073081N

⚠ WARNING

■ Halogen bulbs

- **Halogen bulbs contain pressurized gas that will produce fragment of glass if broken.**
- **Always handle them carefully, and avoid scratches and abrasions. If the bulbs are lit, avoid contact with liquids.**

(Continued)

(Continued)

- **Never touch the glass with bare hands. Residual oil may cause the bulb to overheat and burst when lit.**
- **If a bulb becomes damaged or cracked, replace it immediately and carefully dispose of it.**
- **Wear eye protection when changing a bulb. Allow the bulb to cool down before handling it.**

Headlamp (HID/ LED type), front position lamp, front turn signal lamp, front fog lamp

If the light bulb is not operating, have the vehicle checked by an authorized K900 Kia dealer.

⚠ WARNING

■ HID Headlight low beam (if equipped)

Do not attempt to replace or inspect the low beam (XENON bulb) due to electric shock danger. If the low beam (XENON bulb) is not working, have your vehicle checked by an authorized K900 Kia dealer.

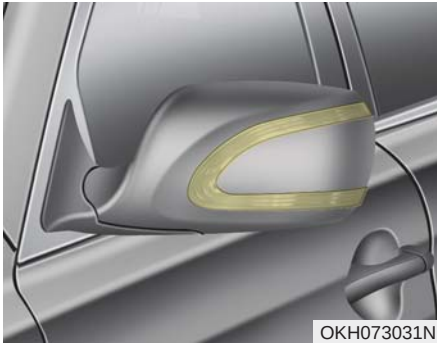
⚠ CAUTION

If your vehicle is equipped with High Intensity Discharge (HID) headlights, these headlights contain mercury. So if you need to have your vehicle disposed, you should remove the HID Headlights before disposal. The removed HID headlights should be recycled, re-used or disposed as hazardous waste.

✻ NOTICE

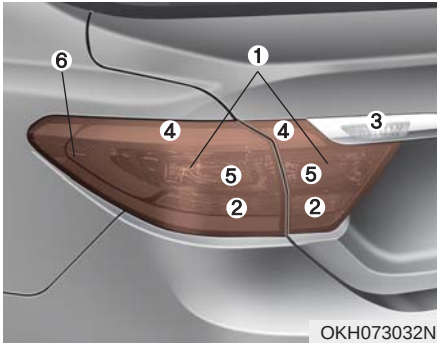
HID lamps have superior performance vs. halogen bulbs. HID lamps are estimated by the manufacturer to last twice as long or longer than halogen bulbs depending on their frequency of use. They will probably require replacement at some point in the life of the vehicle. Cycling the headlamps on and off more than typical use will shorten HID lamps life. HID lamps do not fail in the same manner as halogen incandescent lamps. If a headlamp goes out after a period of operation but will immediately relight when the headlamp switch is cycled it is likely the HID lamp needs to be replaced. HID lighting components are more complex than conventional halogen bulbs thus have higher replacement cost.

Side repeater light bulb replacement


OKH073031N

If the light bulb is not operating, have the vehicle checked by an authorized K900 Kia dealer.

Rear combination light bulb replacement



OKH073032N

(1) Stop and tail light
(2) Rear turn signal light
(3) Back-up light
(4) Tail light
(5) Stop light
(6) Rear side marker light

Stop and tail light, Turn signal light, Back-up light, Rear side marker light

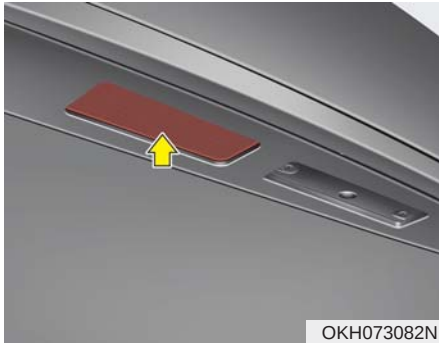
If the light does not operate, have the vehicle checked by an authorized K900 Kia dealer.

High mounted stop light

If the light bulb does not operate, we recommend the vehicle be checked by an authorized K900 Kia dealer.

A skilled technician should check or repair the high mounted stop light, for it may affect the performance of the curtain airbags or damage related interior parts of the vehicle.

License plate lamp replacement

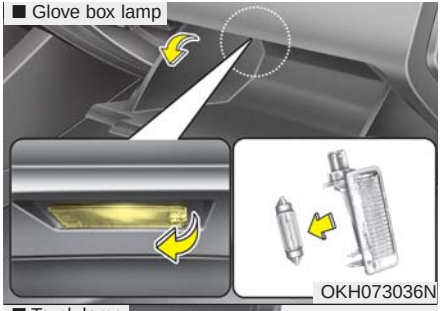


If the light bulb does not operate, we recommend the vehicle be checked by an authorized K900 Kia dealer.

A skilled technician should check or repair the license plate light, for it may affect damage related interior and exterior parts of the vehicle.

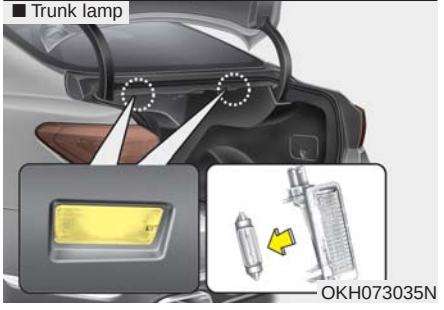
Interior light bulb replacement

■ Glove box lamp



OKH073036N

■ Trunk lamp



OKH073035N

1. Using a flat-blade screwdriver, gently pry the lens from the interior light housing.
2. Remove the bulb by pulling it straight out.

⚠ WARNING

Prior to working on the Interior Lights, ensure that the "OFF" button is depressed to avoid burning your fingers or receiving an electric shock.

3. Install a new bulb in the socket.
4. Align the lens tabs with the interior light housing notches and snap the lens into place.
5. If the map lamp and room lamp are not operating, have the vehicle checked by an authorized K900 Kia dealer.

⚠ CAUTION

Use care not to dirty or damage lens, lens tab, and plastic housings.

APPEARANCE CARE

Exterior care

Exterior general caution

It is very important to follow the label directions when using any chemical cleaner or polish. Read all warning and caution statements that appear on the label.

Finish maintenance

Washing

To help protect your vehicle's finish from rust and deterioration, wash it thoroughly and frequently at least once a month with lukewarm or cold water.

If you use your vehicle for off-road driving, you should wash it after each off-road trip. Pay special attention to the removal of any accumulation of salt, dirt, mud, and other foreign materials. Make sure the drain holes in the lower edges of the doors and rocker panels are kept clear and clean.

Insects, tar, tree sap, bird droppings, industrial pollution and similar deposits can damage your vehicle's finish if not removed immediately.

Even prompt washing with plain water may not completely remove all these deposits. A mild soap, safe for use on painted surfaces, may be used.

After washing, rinse the vehicle thoroughly with lukewarm or cold water. Do not allow soap to dry on the finish.

⚠ CAUTION

- **Do not use strong soap, chemical detergents or hot water, and do not wash the vehicle in direct sunlight or when the body of the vehicle is warm.**
- **Be careful when washing the side windows of your vehicle. Especially, with high-pressure water, water may leak through the windows and wet the interior.**
- **To prevent damage to the plastic parts and lamps, do not clean with chemical solvents or strong detergents.**

⚠ WARNING

■ Wet brakes

After washing the vehicle, test the brakes while driving slowly to see if they have been affected by water. If braking performance is impaired, dry the brakes by applying them lightly while maintaining a slow forward speed.

OKH073050N

⚠ CAUTION

- **Water washing in the engine compartment including high pressure water washing is not recommended. It may cause the failure of electrical circuits or engine and related part located in the engine compartment.**
- **Never allow water or other liquids to come in contact with electrical/electronic components and the air duct inside the vehicle as this may damage them.**

Waxing

A good coat of wax is a barrier between your paint and contaminate. Keeping a good coat of wax on your vehicle will help protect it.

Wax the vehicle when water will no longer bead on the paint.

Always wash and dry the vehicle before waxing. Use a good quality liquid or paste wax, and follow the manufacturer's instructions. Wax all metal trim to protect it and to maintain its luster.

Removing oil, tar, and similar materials with a spot remover will usually strip the wax from the finish. Be sure to re-wax these areas even if the rest of the vehicle does not yet need waxing.

⚠ CAUTION

- **Wiping dust or dirt off the body with a dry cloth will scratch the finish.**
- **Do not use steel wool, abrasive cleaners, or strong detergents containing highly alkaline or caustic agents on chrome-plated or anodized aluminum parts. This may result in damage to the protective coating and cause discoloration or paint deterioration.**

Finish damage repair

Deep scratches or stone chips in the painted surface must be repaired promptly. Exposed metal will quickly rust and may develop into a major repair expense.

✻ NOTICE

If your vehicle is damaged and requires any metal repair or replacement, be sure the body shop applies anti-corrosion materials to the parts repaired or replaced.

Bright-metal maintenance

- To remove road tar and insects, use a tar remover, not a scraper or other sharp object.
- To protect the surfaces of bright-metal parts from corrosion, apply a coating of wax or chrome preservative and rub to a high luster.
- During winter weather or in coastal areas, cover the bright metal parts with a heavier coating of wax or preservative. If necessary, coat the parts with non-corrosive petroleum jelly or other protective compound.

Underbody maintenance

Corrosive materials used for ice and snow removal and dust control may collect on the underbody. If these materials are not removed, accelerated rusting can occur on underbody parts such as the fuel lines, frame, floor pan and exhaust system, even though they have been treated with rust protection.

Thoroughly flush the vehicle underbody and wheel openings with lukewarm or cold water once a month, after off-road driving and at the end of each winter. Pay special attention to these areas because it is difficult to see all the mud and dirt. It will do more harm than good to wet down the road grime without removing it. The lower edges of doors, rocker panels, and frame members have drain holes that should not be allowed to clog with dirt; trapped water in these areas can cause rusting.

⚠ WARNING

After washing the vehicle, test the brakes while driving slowly to see if they have been affected by water. If braking performance is impaired, dry the brakes by applying them lightly while maintaining a slow forward speed.

Aluminum or chrome wheel maintenance

The aluminum or chrome wheels are coated with a clear protective finish.

- Do not use any abrasive cleaner, polishing compound, solvent, or wire brushes on aluminum or chrome wheels. They may scratch or damage the finish.
- Clean the wheel when it has cooled.
- Use only a mild soap or neutral detergent, and rinse thoroughly with water. Also, be sure to clean the wheels after driving on salted roads. This helps prevent corrosion.
- Avoid washing the wheels with high-speed car wash brushes.
- Do not use any alkaline or acid detergent. It may damage and corrode the aluminum or chrome wheels coated with a clear protective finish.

Corrosion protection

Protecting your vehicle from corrosion

By using the most advanced design and construction practices to combat corrosion, we produces cars of the highest quality. However, this is only part of the job. To achieve the long-term corrosion resistance your vehicle can deliver, the owner's cooperation and assistance is also required.

Common causes of corrosion

The most common causes of corrosion on your car are:

- Road salt, dirt and moisture that is allowed to accumulate underneath the car.
- Removal of paint or protective coatings by stones, gravel, abrasion or minor scrapes and dents which leave unprotected metal exposed to corrosion.

High-corrosion areas

If you live in an area where your car is regularly exposed to corrosive materials, corrosion protection is particularly important. Some of the common causes of accelerated corrosion are road salts, dust control chemicals, ocean air and industrial pollution.

Moisture breeds corrosion

Moisture creates the conditions in which corrosion is most likely to occur. For example, corrosion is accelerated by high humidity, particularly when temperatures are just above freezing. In such conditions, the corrosive material is kept in contact with the car surfaces by moisture that is slow to evaporate.

Mud is particularly corrosive because it is slow to dry and holds moisture in contact with the vehicle. Although the mud appears to be dry, it can still retain the moisture and promote corrosion.

High temperatures can also accelerate corrosion of parts that are not properly ventilated so the moisture can be dispersed. For all these reasons, it is particularly important to keep your car clean and free of mud or accumulations of other materials. This applies not only to the visible surfaces but particularly to the underside of the car.

To help prevent corrosion

You can help prevent corrosion from getting started by observing the following:

Keep your car clean

The best way to prevent corrosion is to keep your car clean and free of corrosive materials. Attention to the underside of the car is particularly important.

- If you live in a high-corrosion area — where road salts are used, near the ocean, areas with industrial pollution, acid rain, etc.—, you should take extra care to prevent corrosion. In winter, hose off the underside of your car at least once a month and be sure to clean the underside thoroughly when winter is over.
- When cleaning underneath the car, give particular attention to the components under the fenders and other areas that are hidden from view. Do a thorough job; just dampening the accumulated mud rather than washing it away will accelerate corrosion rather than prevent it. Water under high pressure and steam are particularly effective in removing accumulated mud and corrosive materials.
- When cleaning lower door panels, rocker panels and frame members, be sure that drain holes are kept open so that moisture can escape and not be trapped inside to accelerate corrosion.

Keep your garage dry

Don't park your car in a damp, poorly ventilated garage. This creates a favorable environment for corrosion. This is particularly true if you wash your car in the garage or drive it into the garage when it is still wet or covered with snow, ice or mud. Even a heated garage can contribute to corrosion unless it is well ventilated so moisture is dispersed.

Keep paint and trim in good condition

Scratches or chips in the finish should be covered with "touch-up" paint as soon as possible to reduce the possibility of corrosion. If bare metal is showing through, the attention of a qualified body and paint shop is recommended.

Bird droppings : Bird droppings are highly corrosive and may damage painted surfaces in just a few hours. Always remove bird droppings as soon as possible.

Don't neglect the interior

Moisture can collect under the floor mats and carpeting to cause corrosion. Check under the mats periodically to be sure the carpeting is dry. Use particular care if you carry fertilizers, cleaning materials or chemicals in the car.

These should be carried only in proper containers and any spills or leaks should be cleaned up, flushed with clean water and thoroughly dried.

Interior care

Interior general precautions

Prevent chemicals such as perfume, cosmetic oil, sun cream, hand cleaner, and air freshener from contacting the interior parts because they may cause damage or discoloration. If they do contact the interior parts, wipe them off immediately. See the instructions for the proper way to clean vinyl.

⚠ CAUTION

- **Never allow water or other liquids to come in contact with electrical/electronic components inside the vehicle as this may damage them.**
- **When cleaning leather products (steering wheel, seats etc.), use neutral detergents or low alcohol content solutions. If you use high alcohol content solutions or acid/alkaline detergents, the color of the leather may fade or the surface may get stripped off.**

Cleaning the upholstery and interior trim

Vinyl

Remove dust and loose dirt from vinyl with a whisk broom or vacuum cleaner. Clean vinyl surfaces with a vinyl cleaner.

Fabric

Remove dust and loose dirt from fabric with a whisk broom or vacuum cleaner. Clean with a mild soap solution recommended for upholstery or carpets. Remove fresh spots immediately with a fabric spot cleaner. If fresh spots do not receive immediate attention, the fabric can be stained and its color can be affected. Also, its fire-resistant properties can be reduced if the material is not properly maintained.

⚠ CAUTION

Using anything but recommended cleaners and procedures may affect the fabric's appearance and fire-resistant properties.

Cleaning the lap/shoulder belt webbing

Clean the belt webbing with any mild soap solution recommended for cleaning upholstery or carpet. Follow the instructions provided with the soap. Do not bleach or re-dye the webbing because this may weaken it.

Cleaning the interior window glass

If the interior glass surfaces of the vehicle become fogged (that is, covered with an oily, greasy or waxy film), they should be cleaned with glass cleaner. Follow the directions on the glass cleaner container.

⚠ CAUTION

Do not scrape or scratch the inside of the rear window. This may result in damage to the rear window defroster grid.

EMISSION CONTROL SYSTEM

The emission control system of your vehicle is covered by a written limited warranty. Please see the warranty information contained in the Warranty & Maintenance booklet in your vehicle.

Your vehicle is equipped with an emission control system to meet all applicable emission regulations.

There are three emission control systems, as follows.

(1) Crankcase emission control system
(2) Evaporative emission control system
(3) Exhaust emission control system

In order to assure the proper function of the emission control systems, it is recommended that you have your car inspected and maintained by an authorized K900 Kia dealer in accordance with the maintenance schedule in this manual.

Caution for the Inspection and Maintenance Test (With Electronic Stability Control (ESC) system)

- **To prevent the vehicle from misfiring during dynamometer testing, turn the Electronic Stability Control (ESC) system off by pressing the ESC switch.**
- **After dynamometer testing is completed, turn the ESC system back on by pressing the ESC switch again.**

1. Crankcase emission control system

The positive crankcase ventilation system is employed to prevent air pollution caused by blow-by gases being emitted from the crankcase. This system supplies fresh filtered air to the crankcase through the air intake hose. Inside the crankcase, the fresh air mixes with blow-by gases, which then pass through the PCV valve into the induction system.

2. Evaporative emission control (including ORVR: Onboard Refueling Vapor Recovery) system

The Evaporative Emission Control System is designed to prevent fuel vapors from escaping into the atmosphere.

(The ORVR system is designed to allow the vapors from the fuel tank to be loaded into a canister while refueling at the gas station, preventing the escape of fuel vapors into the atmosphere.)

Canister

Fuel vapors generated inside the fuel tank are absorbed and stored in the onboard canister. When the engine is running, the fuel vapors absorbed in the canister are drawn into the engine intake manifold through the purge control solenoid valve.

Purge Control Solenoid Valve (PCSV)

The purge control solenoid valve is controlled by the Engine Control Module (ECM); when the engine coolant temperature is low during idling, the PCSV closes so that evaporated fuel is not taken into the engine. After the engine warms-up during ordinary driving, the PCSV opens to introduce evaporated fuel to the engine.

3. Exhaust emission control system

The Exhaust Emission Control System is a highly effective system which controls exhaust emissions while maintaining good vehicle performance.

Vehicle modifications

- This vehicle should not be modified. Modification of your vehicle could affect its performance, safety or durability and may even violate governmental safety and emissions regulations.

  In addition, damage or performance problems resulting from any modification may not be covered under warranty.
- Use of unauthorized electric devices may cause: Abnormal vehicle operation, Wire damage, Battery discharge, Fire.

  Be careful not to damage your vehicle by use of unauthorized electric devices.

Engine exhaust gas precautions (carbon monoxide)

- Carbon monoxide can be present with other exhaust fumes. Therefore, if you smell exhaust fumes of any kind inside your vehicle, have it inspected and repaired immediately. If you ever suspect exhaust fumes are coming into your vehicle, drive it only with all the windows fully open. Have your vehicle checked and repaired immediately.

⚠ WARNING

■ Exhaust

Engine exhaust gases contain carbon monoxide (CO). Though colorless and odorless, it is dangerous and could be lethal if inhaled. Follow the instructions on this page to avoid CO poisoning.

⚠ CALIFORNIA PROPOSITION 65 WARNING

Engine exhaust and a wide variety of automobile components and parts, including components found in the interior furnishings in a vehicle, contain or emit chemicals known to the State of California to cause cancer and birth defects and reproductive harm. In addition, certain fluids contained in vehicles and certain products of component wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- Do not operate the engine in confined or closed areas (such as garages) any more than what is necessary to move the vehicle in or out of the area.
- When the vehicle is stopped in an open area for more than a short time with the engine running, adjust the ventilation system (as needed) to draw outside air into the vehicle.
- Never sit in a parked or stopped vehicle for any extended time with the engine running.
- When the engine stalls or fails to start, excessive attempts to restart the engine may cause damage to the emission control system.

Operating precautions for catalytic converters (if equipped)

⚠ WARNING

■ Fire

- **A hot exhaust system can ignite flammable items under your vehicle. Do not park, idle, or drive the vehicle over or near flammable objects, such as grass, vegetation, paper, leaves, etc.**
- **The exhaust system and catalytic system are very hot while the engine is running or immediately after the engine is turned off. Keep away from the exhaust system and catalytic; you may get burned.**

  Also, do not remove the heat sink around the exhaust system, do not seal the bottom of the vehicle or do not coat the vehicle for corrosion control. It may present a fire risk under certain conditions.

Your vehicle is equipped with a catalytic converter emission control device.

Therefore, the following precautions must be observed:

- Use only UNLEADED FUEL for gasoline engines.
- Do not operate the vehicle when there are signs of engine malfunction, such as misfire or a noticeable loss of performance.
- Do not misuse or abuse the engine. Examples of misuse are coasting with the ignition off and descending steep grades in gear with the ignition off.
- Do not operate the engine at high idle speed for extended periods (5 minutes or more).
- Do not modify or tamper with any part of the engine or emission control system. All inspections and adjustments must be made by an authorized K900 Kia dealer.
- Avoid driving with a very low fuel level. If you run out of gasoline, it could cause the engine to misfire and result in excessive loading of the catalytic converter.

Failure to observe these precautions could result in damage to the catalytic converter and to your vehicle. Additionally, such actions could void your warranties.

CALIFORNIA PERCHLORATE NOTICE

Perchlorate Material-special handling may apply, See www.dtsc.ca.gov/hazardouswaste/perchlorate.

Notice to California Vehicle Dismantlers:

Perchlorate containing materials, such as air bag inflators, seatbelt pretensioners and keyless remote entry batteries, must be disposed of according to Title 22 California Code of Regulations Section 67384.10 (a).

Dimensions 8-2
Engine.....8-2
Bulb wattage 8-3
Weight/volume 8-4
Tires and wheels.....8-5
Recommended lubricants and capacities.....8-6
• Recommended SAE viscosity number.....8-8
Vehicle identification number (VIN).....8-9
Vehicle certification label 8-9
Tire specification and pressure label.....8-10
Engine number 8-10
Refrigerant label 8-10
Consumer assistance (U.S only) 8-11
Electrical equipment (U.S only) 8-14
Reporting safety defects.....8-15
Online factory authorized manuals (U.S only).....8-15

DIMENSIONS

Item	in (mm)	
Overall length	200.59 (5,095)	
Overall width	74.80 (1,900)	
Overall height	58.46 (1,485) *1	
Front tread	245/50 R18	63.62 (1,616)
	245/45 R19	63.78 (1,620)
Rear tread	245/50 R18	64.33 (1,634)
	275/40 R19	64.06 (1,627)
Wheelbase	119.88 (3,044)	

*1 with air suspension

ENGINE

Item	Gasoline Lambda II 3.8	Gasoline Tau 5.0
Displacement cu. in (cc)	230.54 (3,778)	307.3 (5,038)
Bore x Stroke in. (mm)	3.78x3.42 (96x87)	3.78x3.42 (96x87)
Firing order	1-2-3-4-5-6	1-2-7-8-4-5-6-3
No. of cylinders	6, V - type	8, V - type

BULB WATTAGE

Light Bulb			Wattage	Bulb type
Front	LED Type	Headlamps (Low)	LED	LED
		Headlamps (High)	LED	LED
	HID Type	Headlamps (Low)	35	D3S
		Headlamps (High)	60	9005HL+
	Side marker lamps		LED	LED
	Front turn signal lamps		LED	LED
	Front position lamps		LED	LED
	Front fog lamps		LED	LED
	Side Repeater lamps (Outside Mirror)		LED	LED
	Puddle lamps		LED	LED
	Daytime running lamps		LED	LED
Rear	Rear Stop/tail lamps (Inside/outside)		LED	LED
	Rear tail lamps (Inside/outside)		LED	LED
	Rear Stop lamps (Inside/outside)		LED	LED
	Rear turn signal lamps (Inside/outside)		LED	LED
	Back-up lamps		16	W16W
	High mounted stop lamp		LED	LED
	License plate lamps		LED	LED

Light Bulb		Wattage	Bulb type
Interior	Map lamps	LED	LED
	Room lamps	LED	LED
	Vanity mirror lamps	LED	LED
	Glove box lamp	5	FESTOON
	Door courtesy lamps	LED	LED
	Foot lamps	LED	LED
	Mood lamps	LED	LED
	Luggage lamp	5	FESTOON

WEIGHT/VOLUME

Item	Gasoline 3.8	Gasoline 5.0
Gross vehicle weight lbs. (kg)	5,357 (2,430)	5,620 (2,550)
Luggage volume cu ft (*l*)	15.9 (450)	15.9 (450)

TIRES AND WHEELS

Item	Tire size	Wheel size	Inflation pressure kPa (psi)				Wheel lug nut torque lb•ft (kg•m, N•m)
			Normal load *		Maximum load		
			Front	Rear	Front	Rear	
Full size tire	P245/50R18	7.5JX18	230 (33)	230 (33)	230 (33)	230 (33)	65~79 (9~11, 88~107)
	P245/45R19	8.0JX19	210 (31)	-	210 (31)	-	
	P275/40R19	9.0JX19	-	210 (31)	-	210 (31)	
Compact spare tire	T155/80R18	4.0TX18	420 (60)	420 (60)	420 (60)	420 (60)	
	T155/70R19	4.0TX19	420 (60)	420 (60)	420 (60)	420 (60)	

* Normal load : Up to 3 persons

⚠ CAUTION

When replacing tires, use the same size originally supplied with the vehicle.
Using tires of a different size can damage the related parts or make it work irregularly.

✻ NOTICE

It is permissible to add 3psi to the standard tire pressure specification if colder temperatures are expected soon. Tires typically loose 1psi for every 12°F temperature drop. If extreme temperature variations are expected, re-check your tire pressure as necessary to keep them properly inflated.

RECOMMENDED LUBRICANTS AND CAPACITIES

To help achieve proper engine and powertrain performance and durability, use only lubricants of the proper quality. The correct lubricants also help promote engine efficiency that results in improved fuel economy.

These lubricants and fluids are recommended for use in your vehicle.

Lubricant		Volume	Classification
Engine oil *[1] *[2] (drain and refill) Recommends (or equivalent) 	3.8L	6.02 US qt. (5.7 *l*)	ACEA A5
	5.0L	7.61 US qt. (7.2 *l*)	API Service SM*[3], ILSAC GF-4 or above
Automatic transmission fluid		10.14 US qt. (9.6 *l*)	GS ATF SP-IV-RR, Kia genuine ATF SP-IV-RR or other brands meeting the above specification approved by Kia Motor Co.,
Power steering fluid		0.95 US qt. (0.9 *l*)	Pentosin CHF 202

Lubricant		Volume	Classification
Coolant	3.8L	9.1 US qt. (8.6 *l*)	Mixture of antifreeze and water (Ethylene glycol base coolant for aluminum radiator)
	5.0L	11.4 US qt. (10.8 *l*)	
Brake fluid		0.7~0.8 US qt. (0.7~0.8 *l*)	FMVSS116 DOT-3 or DOT-4
Rear differential oil		1.48 US qt. (1.4 *l*)	Hypoid gear oil API GL-5, SAE 75W/90 (SHELL HD AXLE OIL 75W/90 Equivalent)
Fuel		19.81 US gal. (75 *l*)	Refer to “Fuel requirements” in section 1

[r1] Refer to the recommended SAE viscosity numbers on the next page.

[r2] Engine oils labeled Energy Conserving Oil are now available. Along with other additional benefits, they contribute to fuel economy by reducing the amount of fuel necessary to overcome engine friction. Often, these improvements are difficult to measure in everyday driving, but in a year’s time, they can offer significant cost and energy savings.

[r3] If the API service SM engine oil is not available in your country, you are able to use API service SL.

Recommended SAE viscosity number

Always be sure to clean the area around any filler plug, drain plug, or dipstick before checking or draining any lubricant. This is especially important in dusty or sandy areas and when the vehicle is used on unpaved roads. Cleaning the plug and dipstick areas will prevent dirt and grit from entering the engine and other mechanisms that could be damaged.

Engine oil viscosity (thickness) has an effect on fuel economy and cold weather operating (engine start and engine oil flowability). Lower viscosity engine oils can provide better fuel economy and cold weather performance, however, higher viscosity engine oils are required for satisfactory lubrication in hot weather. Using oils of any viscosity other than those recommended could result in engine damage.

When choosing an oil, consider the range of temperature your vehicle will be operated in before the next oil change.

Proceed to select the recommended oil viscosity from the chart.

■ **3.8L**

Temperature Range for SAE Viscosity Numbers										
Temperature	°C	-30	-20	-10	0	10	20	30	40	50
	(°F)	-10	0	20	40	60	80	100	120	
Engine Oil *1		10W-30								
		5W-30								

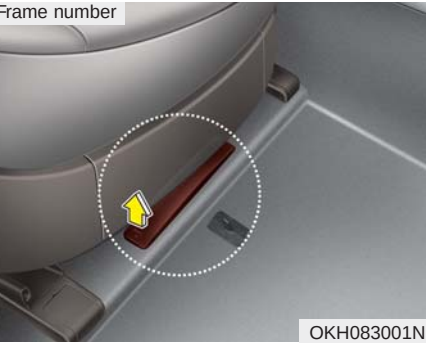
1. For better fuel economy, it is recommended to use the engine oil of a viscosity grade SAE 5W-30 (API Service SM / ILSAC GF-4). However, if the engine oil is not available in your country, select the proper engine oil using the engine oil viscosity chart.

■ **5.0L**

Temperature Range for SAE Viscosity Numbers										
Temperature	°C	-30	-20	-10	0	10	20	30	40	50
	(°F)	-10	0	20	40	60	80	100	120	
Engine Oil *1		10W-30								
		5W-20, 5W-30								

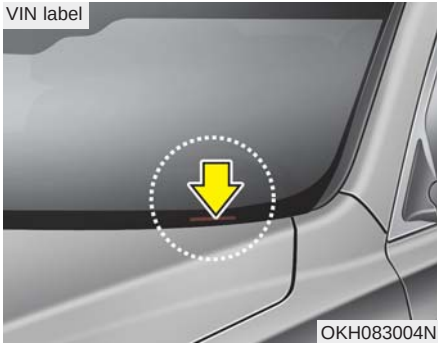
1. For better fuel economy, it is recommended to use the engine oil of a viscosity grade SAE 5W-20 (API Service SM / ILSAC GF-4). However, if the engine oil is not available in your country, select the proper engine oil using the engine oil viscosity chart.

VEHICLE IDENTIFICATION NUMBER (VIN)



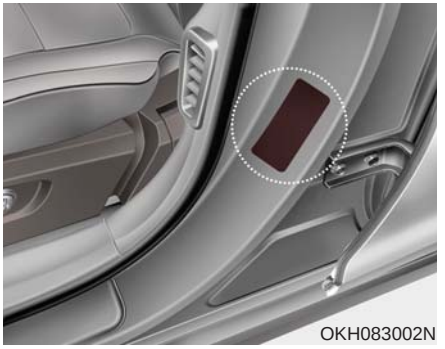
The vehicle identification number (VIN) is the number used in registering your car and in all legal matters pertaining to its ownership, etc.

The number is punched on the floor under the front passenger's seat. To check the number, open the cover.



The VIN is also on a plate attached to the top of the dashboard. The number on the plate can easily be seen through the windshield from outside.

VEHICLE CERTIFICATION LABEL



The vehicle certification label attached on the driver's side center pillar gives the vehicle identification number (VIN).

TIRE SPECIFICATION AND PRESSURE LABEL

OKH073078N

The tires supplied on your new vehicle are chosen to provide the best performance for normal driving.

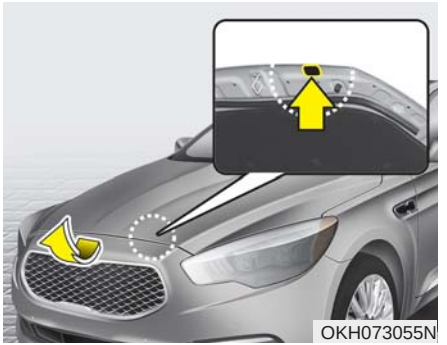
The tire label located on the driver's side center pillar gives the tire pressures recommended for your car.

ENGINE NUMBER

OKH083005N

The engine number is stamped on the engine block as shown in the drawing.

REFRIGERANT LABEL


OKH073055N

The refrigerant label is located on the underside of the hood.

The label contains the following information:

- Type of refrigerant
- Amount of refrigerant

CONSUMER ASSISTANCE (U.S. ONLY)

Roadside Assistance is provided on all new current model year Kia Vehicles from the date the vehicle is delivered to the first retail buyer or otherwise put into use (in-service date), whichever is earlier, for a period of 60 months or 60,000 miles, whichever is earlier, subject to the terms, conditions and exclusions set forth in the Kia Warranty and Consumer Information Manual applicable to your model year vehicle.

KMA reserves the right to limit or deny services or other benefits to any owner or driver when, in KMA's judgment, the claims and/or service requests are excessive in frequency or type of occurrence.

Toll free consumer assistance

Kia's toll-free Consumer Assistance hot line is staffed from 5:00 AM to 6:00 PM PST, Monday through Friday and is accessible by dialing 1-855-4KIAVIP (855-454-2847) or 1-800-333-4KIA (800-333-4542).

For more information regarding assistance available, please refer to your Kia Warranty & Consumer Information Manual.

Emergency roadside assistance

Kia's toll free Roadside Assistance hot line is staffed 24 hours a day, 365 days a year and is accessible by dialing 1-855-4KIAVIP (855-454-2847) or 1-800-333-4KIA (800-333-4542).

Please note that you must provide your Vehicle Identification Number (VIN) to verify coverage at the time of your call. The VIN can be found on the dash of your vehicle on the driver's side, on the door jamb of the driver's door, your vehicle's registration or proof of insurance card.

Kia utilizes a network of over 17,000 roadside assistance providers. Should you accidentally run out of fuel, require a battery jump, or need help changing a tire, a Kia Roadside Assistance Representative will dispatch someone to deliver a small quantity of gas, change a flat tire with your inflated spare, or arrange a battery jump to allow you to proceed to your destination. We have access to a network of over 10,000 locksmiths to help you should you become locked out of your Kia.

In the event that mechanical difficulty renders your vehicle undriveable due to a warranty-related concern, Kia's Roadside Assistance Representative will arrange to transport your vehicle to the nearest Kia dealer or to an alternative service location.

Your vehicle must be accessible to our dispatch transport vehicle, as determined by our driver, to receive this service. In the event that Kia does not have a dealer or an alternative service location available in a particular location, Kia will work with a reputable local service facility to ensure that you receive prompt service. Warranty repairs are performed at no cost.

24-hour Roadside Assistance is a service plan provided by Kia Motors America, Inc. Certain limitations apply. Coverage details are available in the Kia Warranty and Consumer Information Manual.

✻ NOTICE

Roadside Assistance benefits are not available for any Kia vehicle that has ever been or should be issued a "salvage" title or similar "branded" title under any state's law or has been declared a "total loss" or equivalent by a financial institution or insurance company.

Trip interruption

Trip interruption expense benefits are provided in the event that a warranty-related disablement occurs more than 150 miles from your home, and the repairs require more than 24 hours to complete. Reasonable reimbursement is included for meals, lodging, or rental vehicle expenses. Trip interruption coverage is limited to $100 per day subject to a three day maximum limit per incident. You must contact the Kia Roadside Assistance Center to obtain pre-authorization of expenses. Once the Kia Roadside Assistance Center gives authorization for trip interruption benefits, they will assist you in making the necessary arrangements. Insurance deductibles, expenses, and claims paid by your insurance company or other providers are not eligible for reimbursement.

Fleet vehicles are excluded from reimbursement under Kia's Trip Interruption Policy.

Registering your vehicle in a foreign country

If you plan to register your vehicle in a foreign country, you should confirm that it conforms to the regulations in that country. Even if you successfully register the vehicle in a foreign country, you may experience the following problems and should therefore consider the possibility of having to deal with them:

1. The fuel specified for your vehicle may be unavailable. If other than the specified fuel is used, it could cause damage to the engine, the fuel injection system, and other fuel-related parts which may not be covered under your New Vehicle Emissions Limited Warranty.
2. We must, therefore, clearly state that when you leave the country in which you purchased your Kia new and register it in another country, problems arising from the use of fuel other than the specified fuel are not subject to manufacturer's warranty. Because vehicles like yours may not be marketed in the new country of registration, parts, servicing techniques and tools necessary to maintain and repair your vehicle may be unavailable.

   Even if vehicles like yours are sold there, mechanical specifications required by the government may vary enough from the country of purchase to cause additional problems.
3. There may not be an Authorized K900 Kia Dealer in the area in which you plan to register your vehicle. You may additionally experience difficulty in obtaining services in a foreign country for any number of reasons.

Further, we cannot assume any responsibility for problems that result from unsatisfactory service, certain incorrect or misleading information or lack of service received or provided outside the United.

ELECTRICAL EQUIPMENT (U.S. ONLY)

The electrical system of your vehicle is designed to perform under all reasonably expected operating conditions. However, before any additional electrical equipment is installed in your vehicle, consult an Authorized K900 Kia Dealer, in order to ensure that you do not void your warranty.

Certain electrical equipment, or the way in which it is installed, may adversely affect the operation of your vehicle, including such systems as the engine control system, the audio system and the electrical charging system and thus potentially void all or part of your warranty.

We assume no responsibility for any expense you may incur or for any malfunction of your vehicle or any of its components or systems that may result from the installation of additional electrical equipment that is not supplied, or recommended for installation by, Kia.

Installation of a mobile two-way radio system

If a mobile two-way radio system is installed improperly, or if an excessively powerful type of system is used, other electronic systems may be adversely affected. To avoid damage to your vehicle, consult an Authorized K900 Kia Dealer concerning the proper equipment and installation.

Kia motor vehicles are designed and manufactured to meet or exceed all applicable safety standards.

For your safety, however, we strongly urge you to read and follow all directions in this Owner's Manual, particularly the information under the headings "NOTICE", "CAUTION" and "WARNING".

If, after reading this manual, you have any questions regarding the operation of your vehicle, safety issues and defects please contact your Kia's toll-free Consumer Assistance hot line as below:

National Consumer Affairs Manager
Kia Motors America, Inc.
P.O. Box 52410
Irvine, CA 92619-2410
1-855-4KIAVIP (855-454-2847) or
1-800-333-4KIA (800-333-4542).

REPORTING SAFETY DEFECTS (U.S. ONLY)

f you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Kia Motors America, Inc.

f NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Kia Motors America, Inc.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to http://www.safercar.gov; or write to: Administrator, NHTSA, 1200 New Jersey Ave., SE., West Building, Washington, DC 20590. You can also obtain other information about motor vehicle safety from http://www.safercar.gov.

ONLINE FACTORY AUTHORIZED MANUALS (U.S. ONLY)

The following publications are available on www.KiaTechinfo.com at no charge.

Service manual:

This manual covers maintenance and recommended procedures for repair to engine and chassis components. It is written for the Journeyman mechanic, but is simple enough for most mechanically inclined owners to understand.

Electrical troubleshooting manual:

This manual complements the Service Manual by providing indepth troubleshooting information for each electrical circuit in your vehicle.

Owner's manual:

This manual describes the overall features and operating procedures for the vehicle.

Index

A

A/V mode....4-65
Advanced Smart Cruise Control System (ASCC)....5-60
Speed setting (ASCC)....5-61
To convert to cruise control mode....5-69
Vehicle to vehicle distance setting (ASCC)....5-65
Advanced Vehicle Safety a (AVSM)....5-48
AFLS (Adaptive Front Lighting System)....4-116
Air bag warning label....3-62
Air bag warning light....3-42
Air bags....3-39
Air bag warning label....3-62
Air bag warning light....3-42
Curtain air bag....3-55
Driver's and passenger's front air bag....3-51
Inflation and non-inflation conditions....3-56
Occupant detection system....3-45
Side air bag....3-53
SRS Care....3-61
SRS components and functions....3-43
Air cleaner....7-40
Air ventilation seat....4-154
Airconditioning system
Automatic climate control system....4-128
Alarm system....4-14
Antenna....4-163
Anti-lock brake system (ABS)....5-40
Appearance care....7-93
Exterior care....7-93
Interior care....7-99
Armrest (rear)....3-18
ASCC/LDWS mode....4-64
Audio / Video / Navigation system (AVN)....4-162
Auto door lock/unlock feature....4-20
Auto Hold....5-36
Auto light/AFLS position....4-115
Automatic climate control system....4-128
Air conditioning....4-137
Automatic heating and air conditioning....4-129
Manual heating and air conditioning....4-130
Automatic transmission (Shift by cable)....5-11
Manual mode....5-13
Shift-lock override....5-15
Automatic transmission (Shift by wire)....5-16
Manual mode....5-20
When the battery is discharged....5-22
Automatic turn off function....4-123
Aux, USB and iPod® port....4-161

B

Bag hanger....4-158
Battery....7-48
Battery replacement (for smart key)....4-9

Battery saver function....4-113
Before driving....5-4
Blind Spot Detection System(BSD)....5-79
BSD (Blind Spot Detection) / LCA (Lane Change Assist)....5-80
RCTA (Rear cross traffic alert)....5-83
Bluetooth® Wireless Technology hands-free....4-163
Brake system....5-27
Advanced Vehicle Safety Management (AVSM)....5-48
Anti-lock brake system (ABS)....5-40
Auto Hold....5-36
Electric parking brake (EPB)....5-30
Electronic stability control (ESC)....5-42
Hill-start assist control (HAC)....5-46
Power brakes....5-27
Brakes fluid....7-37
Bulb replacement....7-87
Bulb wattage....8-3
Button start/stop, see engine start/stop button....5-6

C

Camera see the Rear-Camera Display....4-107
Capacities (Lubricants)....8-6
Care
Exterior care....7-93
Interior care....7-99
Tire care....7-53
Center console storage....4-146
Central door lock switch....4-19
Certification label....5-101
Chains - Tire....5-94
Checking tire inflation pressure....7-54
Child restraint system....3-32
Lower anchor system....3-37
Seat belt....3-33
Tether anchorage system....3-36
Child-protector rear door lock....4-20
Climate control air filter....7-43
Clock....4-156
Clothes hanger....4-157
Combined instrument, see instrument cluster....4-57
Compact spare tire....6-23
Compact spare tire replacement....7-58
Consumer assistance(U.S. only)....8-11
Coolant....7-34
Cooling fluid, see engine coolant....7-34
Crankcase emission control system....7-100
Cruise control system....5-55
To set cruise control speed....5-56
Cup holder....4-150
Curtain air bag....3-55

D

Dashboard illumination, see instrument panel illumination 4-58
Dashboard, see instrument cluster 4-57
Daytime running light 4-114
Defogging (Windshield) 4-142
Defogging logic 4-143
Defroster 4-127
Outside rearview mirror defroster 4-127
Rear window defroster 4-127
Wiper deicer 4-127
Defrosting (Windshield) 4-142
Dimensions 8-2
Display illumination, see instrument panel illumination 4-58
Displays, see instrument cluster 4-57
Door courtesy lamp 4-125
Door locks 4-17
Auto door lock/unlock feature 4-20
Central door lock switch 4-19
Child-protector rear door lock 4-20
Impact sensing door unlock system 4-20
Power Door Latch 4-18
Rear door lock button 4-19
DRIVE mode 5-52
Drive mode integrated control system 5-52
DRIVE mode / SNOW mode 5-52
Driver Information System (DIS) 4-162
Driver position memory system 3-7
Driver's and passenger's front air bag 3-51
Driving at night 5-90
Driving in flooded areas 5-91
Driving in the rain 5-91
Driving off-road 5-92

E

Economical operation 5-87
Electric chromic mirror (ECM) 4-45
Electric parking brake (EPB) 5-30
Electrical equipment(U.S. only) 8-14
Electronic stability control (ESC) 5-42
Emergency starting 6-5
Jump starting 6-5
Emergency while driving 6-3
Emission control system 7-100
Crankcase emission control system 7-100
Evaporative emission control System 7-100
Exhaust emission control system 7-101
Engine 8-2
Engine compartment 2-7
Engine coolant 7-34
Engine Coolant Temperature guage 4-60
Engine number 8-10
Engine oil 7-32
Engine overheats 6-9

Engine start/stop button 5-6
Engine start/stop button position.....5-6
Illuminated engine start/stop button.....5-6
Engine start/stop button illumination 5-6
Engine start/stop button position 5-6
Engine will not start.....6-4
Evaporative emission control System.....7-100
Exhaust emission control system.....7-101
Explanation of scheduled maintenance items 7-29
Exterior care.....7-93
Exterior overview.....2-2

F

Flat tire 6-17
Changing tires 6-18
Compact spare tire 6-23
Jack and tools 6-17
Jack label.....6-26
Removing and storing the spare tire 6-18
Floor mat anchor(s) 4-157
Fluid
Brakes fluid 7-37
Power steering fluid 7-38
Washer fluid 7-39
Front blind spot monitoring system.....4-110
Front fog light.....4-119
Front lamp switch 4-123
Front seat adjustment - power 3-4
Fuel Economy.....4-80
Fuel filler lid 4-34
Emergency fuel filler lid release 4-36
Fuel Gauge.....4-61
Fuel requirements 1-3
Fuse switch 7-70
Fuses 7-68
Fuse switch.....7-70
Fuse/relay panel description.....7-73
Instrument panel fuse 7-69
Main fuse.....7-72
Multi fuse 7-72

G

Gauges 4-59
Glove box.....4-147
Glove box lamp.....4-126
Gross vehicle weight.....8-4

H

Hazard warning flasher.....6-2
Hazardous driving conditions.....5-89
Head Up Display (HUD).....4-99
Head Up Display Information.....4-100
Head Up Display ON/OFF.....4-100

Head Up Display Setting 4-101
Head Up Display Information 4-100
Head Up Display ON/OFF 4-100
Head Up Display Setting 4-101
Headlight bulb replacement 7-88
Headlight escort function 4-113
Headlight leveling device 4-119
Headlight position 4-115
Headrest(front) 3-8
Headrest(rear) 3-16
Heated steering wheel 4-43
Heater
Automatic climate control system 4-128
High - beam operation 4-117
Hight adjustment (front seat belt) 3-23
Highway driving 5-92
Hill-start assist control (HAC) 5-46
HomeLink® system 4-45
Hood 4-32
Horn 4-44
HUD see the Head Up Display 4-99

I

Immobilizer system 4-12
Impact sensing door unlock system 4-20
Indicator light 4-93
Information Mode 4-65
Inside rearview mirror 4-45
Inside rearview mirror with compass 4-45
Instrument cluster 4-57
Gauges 4-59
Instrument panel illumination 4-58
LCD Display Control 4-58
Transaxle Shift Indicator 4-62
Instrument panel fuse 7-69
Instrument panel overview 2-5
Interior care 7-99
Interior features 4-150
Air ventilation seat 4-154
Bag hanger 4-158
Clock 4-156
Clothes hanger 4-157
Cup holder 4-150
Floor mat anchor(s) 4-157
Luggage net (holder) 4-159
Power outlet 4-151
Rear curtain 4-159
Rear vanity mirror 4-158
Seat warmer 4-152
Side curtain 4-160
Sunvisor 4-150
Interior light 4-123
Automatic turn off function 4-123
Door courtesy lamp 4-125
Front lamp switch 4-123

Glove box lamp 4-126
Rear lamp switch....4-124
Trunk room lamp....4-125
Vanity mirror lamp 4-126
Interior overview 2-4

J

Jack and tools....6-17
Jack label 6-26
Jump starting....6-5

L

Label
Air bag warning label....3-62
Certification label....5-101
Refrigerant label....8-10
Tire and loading information label....5-98
Tire sidewall labeling 7-59
Tire specification and pressure label....8-10
Lane change signals....4-118
Lane departure warning system (LDWS) 5-75
Lap/shoulder belt (3-Point system) 3-22
LCD display....4-63
A/V mode 4-65
ASCC/LDWS mode 4-64
Information Mode 4-65
LCD modes 4-63
Trip computer mode 4-64
Turn By Turn (TBT) mode....4-64
User Settings Mode 4-67
Warning Messages....4-73
LCD Display Control....4-58
LCD modes....4-63
Light bulbs 7-87
Lighting....4-113
Battery saver function 4-113
Daytime running light 4-114
Front fog light 4-119
Headlight escort function 4-113
Headlight leveling device....4-119
High - beam operation 4-117
Lane change signals 4-118
Lighting control....4-114
Turn signals 4-118
Lighting control 4-114
AFLS (Adaptive Front Lighting System) 4-116
Auto light/AFLS position....4-115
Headlight position 4-115
Parking light position 4-115
Lower anchor system 3-37
Lubricants and capacities....8-6
Luggage net (holder) 4-159
Luggage volume 8-4

M

Main fuse 7-72
Maintenance 7-5
Explanation of scheduled maintenance items 7-29
Maintenance services 7-5
Normal maintenance schedule 7-11
Owner maintenance 7-8
Tire maintenance 7-58
Maintenance schedule 7-11
Manual mode - Automatic transmission (Shift by cable) 5-13
Manual mode - Automatic transmission (Shift by wire) 5-20
Map pocket 4-149
Mechanical key operations 4-10
Mirrors 4-45
Electric chromic mirror (ECM) 4-45
HomeLink® system 4-45
Inside rearview mirror 4-45
Inside rearview mirror with compass 4-45
Outside rearview mirror 4-53
Moonroof, see Panoramic sunroof 4-37
Multi fuse 7-72
Multimedia system 4-161
Antenna 4-163
Audio / Video / Navigation system (AVN) 4-162
Aux, USB and iPod® port 4-161
Bluetooth® Wireless Technology hands-free 4-163
Driver Information System (DIS) 4-162
Steering wheel audio control 4-164
USB charger 4-161

N

Non-Powered Trunk 4-21
Normal maintenance schedule 7-11

O

Occupant detection system 3-45
Odometer 4-62
ODS see the Occupant detection system 3-45
Oil (Engine) 7-32
One time driving information mode 4-83
Outside rearview mirror 4-53
Adjusting outside rearview mirror 4-54
Folding the outside rearview mirror 4-55
Reverse parking aid function 4-55
Outside Temperature Gauge 4-62
Overheats 6-9

P

Panoramic sunroof 4-37
Sunroof open warning 4-37
Parking assist system 4-102
Non-operational conditions 4-104
Operation 4-102
Parking Guide System 4-108
Parking light position 4-115
Power brakes 5-27
Power Door Latch 4-18
Power outlet 4-151
Power Trunk 4-22
Power window lock button 4-31
Pre-Safe Seat belt (PSB) 3-28
Pre-tensioner seat belt 3-25

R

Rear curtain 4-159
Rear door lock button 4-19
Rear lamp switch 4-124
Rear seat adjustment (Power seat) 3-13
Rear seat storage 4-146
Rear vanity mirror 4-158
Rear-Camera Display 4-107
Recommended cold tire inflation pressures 7-53
Recommended lubricants and capacities 8-6
Recommended SAE viscosity number 8-8
Record your key number 4-4
Refrigerant label 8-10
Remote keyless entry system operations 4-7
Replacement light bulb 7-87
Reporting safety defects(U.S. only) 8-15
Restrictions in handling keys 4-11
Road warning 6-2
Rocking the vehicle 5-89
Rotation (Tire) 7-55

S

Scheduled maintenance service 7-10
Seat belt Precautions 3-29
Seat belt warning 3-21
Seat belts 3-20
Hight adjustment (front seat belt) 3-23
Lap/shoulder belt (3-Point system) 3-22
Pre-Safe Seat belt (PSB) 3-28
Pre-tensioner seat belt 3-25
Seat belt Precautions 3-29
Seat belt warning 3-21
Seat warmer 4-152
Seatback pocket 4-148
Seats 3-2
Armrest (rear) 3-18
Driver position memory system 3-7

Front seat adjustment - power 3-4
Headrest(front) 3-8
Headrest(rear) 3-16
Rear seat adjustment (Power seat) 3-13
Shift-lock override - Automatic transmission (Shift by cable) 5-15
Side air bag 3-53
Side curtain 4-160
Smart Key 4-4
Battery replacement 4-9
Immobilizer system 4-12
Mechanical key operations 4-10
Record your key number 4-4
Remote keyless entry system operations 4-7
Restrictions in handling keys 4-11
Smart key functions 4-4
Smart key precautions 4-6
Transmitter precautions 4-8
Smart key functions 4-4
Smart key precautions 4-6
Smooth cornering 5-90
SNOW mode 5-52
Snow tires 5-93
Spare tire
Changing tires 6-18
Compact spare tire 6-23
Compact spare tire replacement 7-58
Special driving conditions 5-89
Driving at night 5-90
Driving in flooded areas 5-91
Driving in the rain 5-91
Driving off-road 5-92
Hazardous driving conditions 5-89
Highway driving 5-92
Rocking the vehicle 5-89
Smooth cornering 5-90
Speedometer 4-59
SRS Care 3-61
SRS components and functions 3-43
Starting difficulties, see engine will not start 6-4
Starting the engine 5-9
Starting the engine with a smart key 5-9
Starting the engine - With a smart key 5-9
Steering wheel 4-42
Electronic Hydraulic Power Steering (EHPS) 4-42
Heated steering wheel 4-43
Horn 4-44
Tilt and telescopic steering 4-42
Steering wheel audio control 4-164
Storage compartment 4-146
Center console storage 4-146
Glove box 4-147
Map pocket 4-149
Rear seat storage 4-146
Seatback pocket 4-148
Sunglass holder 4-147

Sunglass holder....4-147
Sunroof open warning....4-37
Sunvisor....4-150
Surround View Monitoring System (SVM)....4-111

T

Tachometer....4-59
Tether anchorage system....3-37
Theft-alarm system....4-14
Tilt and telescopic steering....4-42
Tire and loading information label....5-98
Tire chains....5-94
Tire pressure monitoring system....6-11
Tire rotation....7-55
Tire specification and pressure label....8-10
Tires and wheels....8-5
  Checking tire inflation pressure....7-54
  Compact spare tire replacement....7-58
  Low aspect ratio tire....7-63
  Recommended cold tire inflation pressures....7-53
  Tire care....7-53
  Tire maintenance....7-58
  Tire replacement....7-57
  Tire rotation....7-55
  Tire sidewall labeling....7-59
  Tire traction....7-58
  Wheel alignment and tire balance....7-56
  Wheel replacement....7-58
Towing....6-27
  Emergency towing....6-30
  Removable towing hook....6-29
Trailer Towing....5-97
Transaxle Shift Indicator....4-62
Transmission - Automatic transmission
  (Shift by cable)....5-11
Transmission - Automatic transmission
  (Shift by wire)....5-16
Transmitter precautions....4-8
Trip A/B....4-82
Trip computer....4-80
  Fuel Economy....4-80
  One time driving information mode....4-83
  Trip A/B....4-82
Trip computer mode....4-64
Trunk....4-21
  Emergency trunk safety release....4-26
  Non-Powered Trunk....4-21
  Power Trunk....4-22
  Trunk Lid Control Button....4-25
Trunk Lid Control Button....4-25
Trunk room lamp....4-125
Turn By Turn (TBT) mode....4-64
Turn signals....4-118

U

USB charger 4-161
User Settings Mode 4-67

V

Vanity mirror lamp.....4-126
Vehicle break-in process 1-5
Vehicle data collection and event data recorders.....1-6
Vehicle identification number (VIN).....8-9
Vehicle load limit.....5-98
  Certification label.....5-101
  Tire and loading information label.....5-98
Vehicle weight 5-103

W

Warning light 4-84
Warning Messages 4-73
Washer fluid.....7-39
Welcome system 4-112
  Headlight 4-112
  Interior light 4-112
  Puddle lamp.....4-112
Wheel alignment and tire balance 7-56
Wheel replacement 7-58
Windows 4-28
  Power window lock button.....4-31
Windshield defrosting and defogging.....4-142
Windshield washers 4-122
Windshield wipers 4-120
Winter driving.....5-93
  Snow tires.....5-93
  Tire chains.....5-94
Wiper blades 7-45
Wipers and washers 4-120
  Windshield washers.....4-122
  Windshield wipers.....4-120

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